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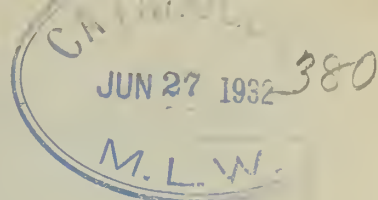
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Number 2

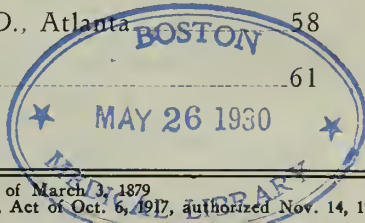
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DEVOTED TO THE WELFARE OF THE MEDICAL PROFESSION OF GEORGIA  
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No. 1

## THE FUTURE OF THE SMALL SCHOOL OF NURSING IN GEORGIA\*

JANE VAN DE VREDE, R.N.  
*Atlanta*

The subject of this paper was assigned me. It is the last subject I would have chosen or felt myself competent to discuss. I should have to have a greater clairvoyance than is given to ordinary mortals to predict the future of our schools of nursing with any greater degree of accuracy than the weather man does the weather. Any prophecy as to the future of the school of nursing from an academic standpoint would be premature in the light of the work that the National Grading Committee is now doing.

However, some one has truly said "The future does not come from before to meet us, but comes streaming up from behind, over our heads!"

I shall try to show that the history and development of our schools bear a very definite relation to their present situation and to their trends for the future, in the hope that your conclusions may serve as a guide for certain immediate action, and give us an assurance that it lies within our power to improve conditions and solve some of the problems confronting us, provided we are willing to face the facts and are sincere in our desire to improve the situation.

Let us go back to the origin of the schools of nursing in England and America, to find the central idea in their organization, and the method of carrying them out.

The first real school of nursing was established in 1860 from the funds received by Miss Nightingale as an appreciation for her work in the Crimean War, at St. Thomas

Hospital, London. It was not established by the hospital, but by a so-called Committee. This Committee controlled all the educational features of the nurses' training and made a contract with the hospital to give teaching and experience and supervision, in return for services rendered the sick. The Committee paid for the board and uniforms of students, and for a certain part of head nurses' and directress' salaries.

The early schools in this country were organized along these lines also. Under this plan a remarkable change for the better took place in the care of the sick, and under very economical conditions for the hospitals.

It is perhaps inevitable that gradually these committees should have surrendered their rights, duties and responsibilities to the hospitals themselves, and that one by one hospitals incorporated these schools of nursing into their own organizations, assuming full control and responsibility for their maintenance. Today 98 per cent of the nearly 2,200 schools of nursing is directly under the control of the hospitals with which they are connected.

In Georgia there is not a single school of nursing that is not "part and parcel" of the hospital it serves.

Miss Nutting, in her book "A Sound Economic Basis for Schools of Nursing" says, speaking of the school of nursing: "It stands unique as an educational institution of high importance to society, owned and used by another institution for purposes of its own, in which education plays a relatively unimportant part."

The underlying reason for this change of method was undoubtedly an economic one, and to this Miss Nutting says "What is needed now in our hospitals is a truer conception of the responsibilities which are inevitably assumed in attempting to direct,

\*Read before the Hospital Association, Macon, Georgia, May 7, 1929.

control and develop in any adequate way this large, complicated and most vital branch of professional education, and ability to face the situation squarely and recognize that adequate funds are just as necessary for the proper maintenance of schools of nursing as they are for schools of engineering or of any other profession "No equitable or stable adjustment can ever be made between hospitals and schools of nursing until this fact is understood, accepted and made to bear upon the whole scheme of training."

As hospitals have increased their bed capacity, they have increased the student body. Our fifty-four hospitals with nursing schools in Georgia in 1928 had 1,251 students.

Nurse educators and economists believe that the time has come to change our methods of service in this regard. That the basic service to patients should be given by graduate nurses and supplemented by students as in other practice teaching fields. Miss Goodrich, in a memorable address on "The Nurse as a Citizen," said:

"The hospital now awaits for its highest achievement the day when an appreciation of its economic value to the community insures its conduct in the matter of selection, numbers, emolument, stability and the physical protection of its staff, on a basis that will compare favorably with the most socially efficient industrial or business concerns. This will mean that the ratio of graduate staff to students will be more nearly in accord with the ratio (six to one) in the visiting nurse organizations, engineering projects and business concerns that provide the practice field for students of these subjects, whereas at present the reverse is the case.

Such a change would mark a new era of hospital service to the community, both in its greater satisfaction to the sick and in its increased value as a teaching field.

There is some evidence that the pendulum has begun to swing back to the conception of the early schools. California has a number of autonomous schools of nursing serving one or more hospital. The University of Minnesota, since 1911, has been conducting a school of nursing which serves five hospitals, and there are several instances in a number of states. The plan of consolidation of hospitals

as evidenced by the report of the American Medical Association for reasons of economy should be paralleled by the consolidation of nursing schools, and superseded in many instances. There seems no good reason, once we had a better budgetary system for our schools, why several could not combine much of the theoretical instruction. State, county and municipally owned and conducted schools should assume leadership in such a plan, since nurse education is a public responsibility and funds may rightly be expected to come from a more equally distributed cost burden for the organization and conduct of such schools, beyond what students pay in tuition or service.

The almost universally accepted idea of hospitals and physicians who own them has been that it is cheaper to train nurses than to use other types of service. The facts as determined by these California, Illinois and Minnesota school challenge this idea! The hospitals that run separate budgetary records for the school of nursing and the hospital indicate that it costs all the way from 26c per patient day more to maintain a school of nursing to 80c per patient day to maintain a teaching hospital, than one without teaching facilities.

How long will we go on reiterating that the main reason for having a school of nursing is that other types of service are prohibitive from a financial standpoint?

We have no reason to assume that what is true in California, Illinois and Minnesota is true in Georgia.

This organization (Georgia Hospital Association) could make a valuable contribution to this question if it could undertake the securing of facts of this nature about Georgia schools. One hospital in this state, the John D. Archbold Memorial, of Thomasville, is studying what it costs to maintain its schools of nursing. The Board of Trustees has decided, however, to include any necessary increase in budgets they may have, because it believes that the student service rendered is more satisfactory to patients and affords a contribution to nursing education. This institution is fortunate in having an endowment which allows it to make such a decision.



The conclusion is, however, being generally accepted that such additional cost should not be a charge against the patient, but should come from funds contributed for the purpose or appropriated from public funds coming from a distributed burden to the entire citizenship.

As to standards in our hospitals and schools—the American Medical Association has set definite standards as to qualified hospitals, and registered 114 in Georgia in 1928. It outlines meticulous requirements for the training of internes, but as to nursing it names as essential “One or more competent nurses, depending on the average number of patients.” The interpretation of the word “competent” is as varied as the number of hospitals.

However, a committee of the A. M. A. made a study of the nursing situation, with the following conclusions:

“That the educational standard of nurse training include (a) entrance requirements consisting of a four-year high school education; (b) that the length of the course be two years and four months, or 28 months; (c) that the waste of the student nurses’ time in non-educational ward routine be greatly reduced; (d) that better teachers from both the medical and nursing professions be secured in the schools; (e) that the character and sequence of subjects taught, the percentage of time allotted to each subject, and the correlation of practical and theoretical instruction be considered with special care, and (f) that the standard be such that it may be carried out by relatively small as well as large hospitals.

“That there be a classification of nurse training schools in which only those which conform to the standard outlined be considered as acceptable.”

This Committee went on record that it “appreciated the fact that these changes in nurse training schools might cause increased expenses in the hospitals maintaining nurse training schools; nevertheless, it was believed that the improvements would more than offset this expense in preventing serious results and greater expense which might accrue to the hospitals from the present increasingly

chaotic conditions in nurse education.”

The College of Surgeons has set down standards for approved hospitals. Thirty-six of the 114 hospitals of this state applied for standardization approval, and 23 were approved in 1928.

The pronouncement of the College of Surgeons in regard to nursing is as follows:

“To assure the patient the best nursing care the following suggestions are submitted as a practical basis for an efficient nursing service, particularly as applying to hospitals conducting schools of nursing, as most do at present:

1. That there shall be a properly organized nursing department under competent supervision and direction for the administration of the nursing service and the education of the student nurse. This department to embrace at least (a) a superintendent of nursing, principal of the school of nursing, and other necessary executive officials. (b) An adequate corps of graduate nurse supervisors, competent in their respective fields, for supervision of the nursing service in the various clinical departments of the hospital. (c) A teaching faculty consisting of the teaching personnel of the nursing staff and the members of the medical staff engaged in the instruction of the student nurses. (d) A nursing committee appointed by the governing body of the hospital and consisting of representatives from the board and medical staff, as well as the superintendent and principal of the training school, and others deemed advisable to act in an advisory capacity in all matters pertaining to the education of the student nurse.

2. That due care be exercised in the selection of the student nurse from the physical, mental and moral standpoints and that proper living, working and educational conditions be provided so as to attract to the nursing profession the type of woman that one may satisfactorily instruct and safely entrust with the care of the sick at all times.

3. That the preliminary educational requirement for admission to schools of nursing be three years high school or its equivalent as a minimum, and that the course of training be not less than three years, em-

bracing the theory and practice of nursing necessary for a general training, and as best equips her for the efficient nursing care of the patient.

4. That there shall be a sufficient range and variety of clinical material, either in the hospital or through acceptable affiliation—a properly equipped classroom and adequate laboratory facilities for the theoretical and practical instruction of the student nurse in accordance with one or other of the standard curricula.

5. That there shall be a comprehensive system of school and hospital records—the former indicating the progress and standing of the student nurse throughout her training, and the latter providing an accurate record of the nursing observations and care of the patient.

6. That due care be exercised at all times to insure safe and efficient care of the patient through

(a) Proper ratio of nurses to patients.

(b) Careful assignment of duties to student nurses.

(c) Competent supervision of student nurses in all nursing procedures.

7. That there shall be regular meetings of the graduate nursing staff, at least once a month, to review and analyze the nursing and determine the causes of progress or of service and educational work of the month, inefficiencies in order to increase the efficiency of the nursing service and improve the education of the student nurse."

"In no other way can hospitals today render a better nursing service to their patients than living up to the above suggestions. There is no reason why the proper education of the student nurse and the care of the patient cannot go hand in hand. Nursing education should prepare the nurse to think more freely, clearly, logically, and accurately, hence prompting her to act more readily, intelligently, precisely and efficiently, all of which tends to better care of the patient. We should, therefore, think of nursing education in terms of better care of the patient both from the curative and preventive aspects."

If these standards were adopted it would

eliminate at least 75 per cent of our schools of nursing in Georgia.

The A. H. A. has not indicated independent standards for schools of nursing, but accepts the standards of the Board of Nurse Examiners in the state where the school of nursing is located. In Georgia the Board of Nurse Examiners is charged with the responsibility of defining all qualifications for applicants for registration, which is mandatory. They are mainly—Age, 18 years as the minimum (and schools constantly disregard this regulation and accept students of 17 years of age into the schools. I am confident that this is one of the sources of many of our difficulties. In the earlier history of our schools young women were required to be 22-25 before entering the school of nursing, hence the young woman had attained a maturity physically and a stability of character as well as cultural background before she entered the hospital. Though young women did not go to college so often during those days, they came from the same group as is represented now in colleges). Preliminary education—two years of high school as a minimum. Ten schools in the state require four years of high school, and seven schools require three years; the remaining thirty-seven require only two years of high school work. No one thing our schools could do would so rapidly improve the character of the nursing of our hospitals and so quickly bring satisfaction to patients and physicians as to raise entrance requirements to a full high school course.

The conclusions of the Committee on Nursing of the A. M. A., of the Rockefeller Report on Nursing Conditions in the United States, the general opinion of nurse educators, and now the overwhelming evidence of the Grading Committee, all agree that a full high school education should be required for entrance into schools of nursing. Obviously our schools will do well to raise their entrance requirements as rapidly as the conditions will permit, since it is the experience of our schools that an increased number of applications from well qualified candidates is the immediate result.

The general educational qualifications of the student must be approved by the Board when the nurse enters the school so as not to work a hardship on her at graduation.

**Curriculum:** The oft-heard complaint from physicians is that too much theory is being given and not enough practical work. In 1920 the State Board of Examiners adopted the 1917 edition of the Standard Minimum Curriculum at the request of the State Nurses' Association. We have been trying for nine years to get our schools to carry it out and have not raised the requirements since that time. This curriculum outlines the organization of a training school committee, a school staff with regular conferences of supervisors and teaching personnel, practical experience in all the major branches of nursing, adequate records according to an established system (the Georgia Board of Nurse Examiners suggests forms required) and a theoretical instruction covering from 520 to 580 hours of class work and lecture work—or less than one hour of theory to ten hours of practical work.

Other vocational schools are usually based on one hour of theory to four or five of preparation and presupposes an elementary knowledge of a number of scientific subjects.

The division of practical work is difficult in most of our schools since services are not segregated. The Board now requires case report blanks to be kept by each student, from which can be determined the amount of medical and surgical pediatric and obstetrical experience given. Summaries of these should be transferred to the students' permanent record. The complete care of at least six cases of obstetrics is required by each student. This, too, is comparatively low. Special duty during training should be limited to four months. Night duty to four months; operating room experience to four months. The length of the course is three years, including vacations and sick leave, which should not exceed four weeks in any year nor be less than two weeks. The course should not be shortened by accumulative vacation nor lengthened by disciplinary measures.

The State Board of Examiners in 1919 established a daily average of 20 patients as

the minimum under which the hospital could maintain a school of nursing.

The Committee on Nursing of the American Medical Association came to the conclusion that fifty beds was the minimum capacity. This would be an average of about 30 patients daily. The National League of Nursing Education and the National Organization for Public Health Nursing require graduation from a school connected with a hospital having a daily average of 30 patients as a requirement for membership.

The Committee on County Hospitals of the American Hospital Association asserts "The small hospital of 50 beds or less cannot maintain a training school of accepted standards except at almost prohibitive costs." It adds, "The small hospital may doubtless serve as a training school for less highly skilled nursing aides or attendants." If this standard generally agreed upon as desirable were adopted, 22 schools would have to be eliminated. Our standard is, therefore, relatively low. Where the hospital has less than 20 patients daily, or where incomplete services are available, affiliation must be secured to meet the deficiency. Such affiliations must be approved by the Board of Examiners of Nurses. Where students are transferred from one school to another, the approval of the Board of Examiners must be secured if credits are allowed in time or theory.

**Personnel:** When a training school is organized, regularly qualified Registered nurses shall be employed to direct the education of the nurses, supervise their practical work and superintend their activities in the nurses' home.

We hear constantly affirmed that there is a shortage of nurses in the rural districts and small towns, and the impression prevails even in cities among doctors and patients. There is psychological reason for these statements. It is found in the scarcity of bedside service in hospitals by student and floor duty nurses. The increased demands of diet, clinical and pathological laboratories, x-ray and physiotherapy and mechanotherapy departments and special treatments leave small margin for the comfort care of the sick or the mental hygiene of the patient, where the nurse makes



the greatest and most unique contribution. The modern method of hospital and medical procedure also gives less time in bedside clinical service and instruction, and the student nurse is correspondingly handicapped and limited in her services to the patient.

We have increased the number of our schools of nursing in Georgia from 34 in 1922 to 54 in 1928, and graduated correspondingly more nurses; and even so there is scarcity of nursing service at the bedside. We cannot cut down the ratio of theory to practice—it is already too low. We cannot increase the number of student nurses, since by so doing in a short time we increase the unemployment among graduate nurses; still we need more nursing at the bedside.

It seems only reasonable to try two things: Secure additional types of personnel for some of the duties relating to service to the sick, and find methods of using more of the graduates of our hospitals in the locality where they are educated. By organizing hourly and private visiting nursing in homes from the hospital, with one or more graduate nurses working part time in the hospital and part time in homes.

By group nursing in the hospital with graduates, by floor duty with graduate and student service.

There are 2,500 nurses qualified to practice for 1929. There are 1,250 students in our schools. Possibly 400 nurses are practicing illegally, in the state. There are some 200 undergraduate nurses, and no way of knowing how many practical nurses are employed for hire.

There is one hospital bed available for every 270 persons in the United States. In Georgia we have only one bed available for every 666 persons; but what is more significant still, they were only 57 per cent occupied in 1928!

The future seems clearly to merit our earnest study of the present situation and lead to providing better instruction to students more wisely chosen, of better preparation and a definite extension of hospital facilities and the expanding of the students after they have been prepared.

## ROUND WORM INFECTION IN CHILDREN\*

### *Case Report*

R. C. GOOLSBY, JR., M. D.  
Macon

The *Ascaris lumbricoides*, or round worm is cosmopolitan in distribution. Though more abundant in warm regions, it has been reported from Finland and lives in all latitudes and climates. It is abundant in the pig. It has been known as a human parasite since ancient times, being recorded in medical writings of both Greek and Romans.

When discharged from the body of the host, the eggs are still undivided and must be incubated for a period depending on the external temperature before they become capable of infecting a proper host. They may be cultured in tap water. The eggs are highly resistant to unfavorable conditions. They withstand low temperatures and considerable desiccation for long periods. They survive for more than a month in urine and continue to develop even in a strong solution of salt and in powerful preservatives.

Cleavage begins after the eggs are discharged from the host and the development of the embryo under most favorable circumstances of moisture and warmth requires from thirty to forty days, though Wharton reports that at room temperature, *Ascaris* embryos develop from freshly laid eggs in ten days. The full grown embryo does not desert the egg shell but lies within it coiled in a spiral until it is introduced by chance into the alimentary canal of the human host, when it is set free by digestion.

Infection is evidently dependent on the chance ingestion of eggs in which the embryo is fully developed, for experiment indicates that before that time the eggs are not infective. Contaminated drinking water or food such as lettuce or radishes, imperfectly cleaned and eaten uncooked, may introduce the eggs into the human system. The eggs remain living and infective up to five years, at

\*Read before the Sixth District Medical Society, Indian Springs, Ga., June 26, 1929.

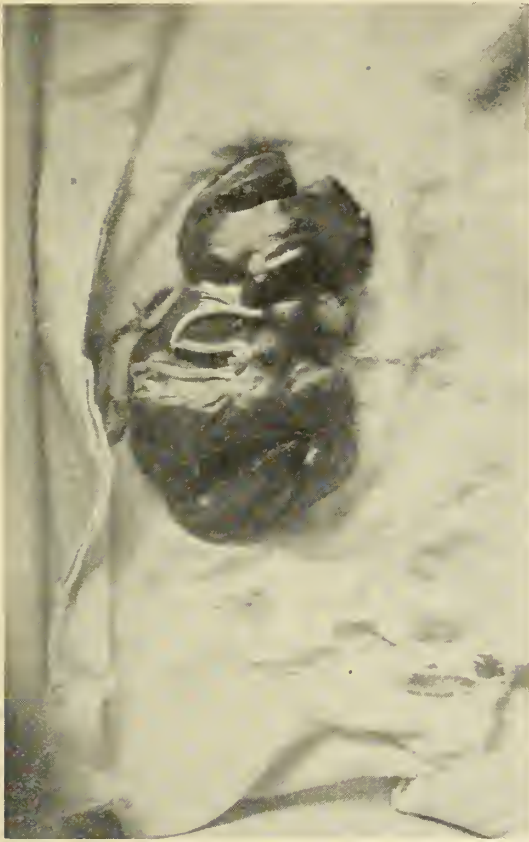


Figure I.

Child's liver—age 2 years. May 15, 1929. The above picture shows in addition to the bodies of the round worms in the liver, an abscess of the liver.



Figure II.

Child's liver—age 2 years. May 15, 1929. The above picture shows the bodies of the round worms protruding from the common bile duct and also bodies of the worms cut through near the periphery of the liver.

least, in water, and probably longer in moist earth.

Mosler, in 1867, and Lutz, in 1888, had observed the occurrence of pulmonary symptoms in man following the experimental ingestion of *Ascaris* eggs.

In some experiments by Koino, five hundred eggs were administered to a robust man of twenty-one, in whom, on the 9th day, a slight pneumonia developed. Koino also took two thousand eggs, which caused a slight fever on the third day, with chills on the sixth day, lasting nine days, the maximum temperature being 104°F. Larvae were recovered from the sputum on the third day.

Ransom has demonstrated how the *Ascaris* larvae may reach various locations in the liver, spleen, lymph-nodes, thyroid, brain and kidneys, as well as the lungs, by which the normal life cycle is fulfilled.

One may group the pathologic effects of ascariasis under four subheadings: (1) Me-

chanical destruction of tissue during its wanderings; (2) introduction of infection as a consequence of these migrations; (3) production of a broncho-pneumonia by the larvae, and (4) influence of dangerous toxins. While in the recent past the presence of these parasites has been regarded as a minor ailment, such an attitude is no longer possible in view of the rapidly accumulating evidence of their serious and even fatal influences, both direct and indirect, especially in children.

From its normal seat in the duodenum the adult parasite often wanders into the stomach and may continue into the esophagus and pharynx. From this point, worms may enter the larynx with fatal results. Migrating farther, the worms have been known to enter the Eustachian tube, to pass through the middle ear, piercing the tympanum and emerging from the external auditory meatus. Or the worm may pass out the tear duct.

But the parasite does not always confine itself to normal passageways. It was reported in an intra-abdominal abscess by Jackson,

from Holton, Maine. Another is recorded in an infected infant only 22 months old. Also an ascarid was found in a pleural cavity abscess in a baby girl 2 1-2 years old and in a boy of 1, and one in the scrotum of a boy of 7. The emergence of ascarides through the abdominal wall is recorded in many cases. An impacted mass of ascarids has often been the cause of intestinal obstruction in children.

Ascaris is of some surgical importance in that it may cause ileus, spasm, invagination or perforation of the intestines.

The entry of ascaris into the bile duct may cause partial or complete obstruction. Most of such cases are among patients in later life, but a fatal case in a baby of two, and two relieved by operation in children of 12 and 7 are reported. In 152 cases in the Philippines, the worms occurred five times in the liver and twice in the gall-bladder but migration was probably stimulated by abnormal conditions of the bowel as all of these patients died of cholera. When the bile duct is invaded, the parasite may penetrate the tissues of the liver, in which specimens were found by Crowell and Hammock in two cases from the Philippine Islands. In one other instance, ova, but no adult forms, were discovered in sections of the liver of a child of three years.

Symptoms are not characteristic. They include fever and pain in the umbilical region, resembling early peritonitis or appendicitis with pronounced tenderness and other local symptoms. In extreme cases, emaciation often pronounced, tympanitic abdomen, general pain and depressed physical condition, are observable in the child. The blood usually shows an eosinophilia of 8% or even more, and the presence of the ova in the faces indicates the cause of the discomfort. They may cause symptoms resembling intussusception.

#### CASE REPORT

Bennett Atkins, a colored male child, two years old, was admitted to the ward at the Macon Hospital, May 9, 1929. He came because of fretfulness and loss of weight.

Family history—Negative.

Past history—Has had no other sickness.

Present illness—Mother says child has been losing weight for several months, has

cried a great deal and has frequently passed many very large round worms, about six inches long and 1-4 inch in diameter, white in color. Has also vomited worms at times.

Physical Examination—Temperature 97° F. Patient is a very emaciated colored infant, about two years old. Not apparently feverish but in some pain.

Head—Negative.

Neck—Negative.

Chest—Negative except for signs of rickets. Cardio-Vascular—Negative.

Abdomen—Pot bellied, distended and tympanitic, no masses felt.

Skin—Negative.

Bones and joints—Show evidence of rickets.

Glandular—Lymph glands can be felt in cervical and inguinal regions, as very small, shot-like masses.

Neuro—muscular: Wrist, biceps, abdominal and patella reflexes present, equal, and lively.

White blood count, 11,250.

Polys, 55%.

Small lymphs, 28%.

Large lymphs, 17%.

May 10. Child eating well, temperature sub-normal. Child rather quiet, but at times gives short, sharp cries.

May 11. Passed 7-inch round worm during the night; eats less and seems in more pain during day.

May 12. Slept little last night. Eats little. Passed 8-inch round worm; stool watery, yellow color at 8:30 A. M. At 9 A. M. respiration became gasping. At 9:30 A. M. passed six 8-inch round worms. At 10:15 A. M. ceased to breathe.

May 11. Fifteen drops of carbon tetrachloride was ordered given after a four hour fast, the dose to be repeated in two hours and one dram of Magnesium Sulphate to follow in two hours after the last dose of carbon tetrachloride.

*Post mortem examination, Bennett Atkins died: May 12, 1929.*

Autopsy: May 13, 1929

*Anatomic Diagnosis:* Ascariasis of the liver and intestinal tract, with abscess formation of the liver; petechial hemorrhages of the stomach and intestines; extreme emaciation.

The body is that of a fairly well developed, poorly nourished colored male child, looking to be about two years old. Anterior and



posterior fontanels closed; pupils are dilated and equal; teeth appear sound; small lymph glands can be felt on both sides of the neck and inguinal regions; the costo-chondral junctions are nodular and enlarged; the abdomen is scaphoid; testicles are not in the scrotum, but can be felt in the inguinal canal on both sides. There is no subcutaneous fat in the midline.

The abdominal cavity contains about 300 c. c. of clear fluid; the peritoneal surfaces smooth and shining; the omentum is free except for a slight attachment to the lower edge of the liver, and shows serious atrophy of its fat; the liver edge is above the costal margin; the diaphragm is at the third rib on the right, and fourth on the left; the appendix vermiformis is normal; the foramen of Winslow is patent and the lesser peritoneal cavity seems normal. There is an accessory spleen about 1 cm. in diameter; the urinary bladder is moderately distended. The spleen is of normal size, color and consistency; the surface is light red; malpighian bodies cannot be seen.

The pancreas appears to be normal; there are several lymph glands at the hilus of the liver, averaging about 1 cm. in diameter. The liver is rather small and nodular in appearance, and here and there shows purplish depressed areas. On the upper surface of the right lobe is a yellowish white, bulging area, which fluctuates on pressure, and is about 1 cm. in diameter. There are similar areas on the under surface of both right and left lobes. Also on the surface there are groups of distended lymphatics.

Protruding from the ampulla of Vater is the head of a large round worm. Upon opening the ductus to its bifurcation it is found to be widely distended, about 25 m. m. in circumference, and containing at this point, eight large worms. The cut surface shows several abscesses and several bodies of worms. One body of a worm in the distal part of the duodenum. The stomach and esophagus are free of worms, and appear normal; the jejunum is free; the distal ileum contains four; in the caecum there is one, in the colon two, and the sigmoid two, the rectum none.

There are petechial hemorrhages at intervals along the entire gastro-intestinal tract below the esophagus.

The pleural cavities are normal, surfaces smooth and shining. No adhesions. The lungs are pinkish gray and crepitant throughout. The posterior right lower lobe is slightly congested; the cut surface is pink and ap-

pears normal—there being no sign of worms here.

The heart and pericardial cavity, as well as the great vessels of the thorax, appear normal. The adrenals are normal in appearance. The kidneys are normal in size and color; the capsules strip readily, leaving a smooth surface. The cut surfaces are normal. The cortical markings are distinct. The mucous membrane of the ureters and bladder is normal; the prostate is normal; the thoracic and abdominal aorta is normal. The thymus is mostly replaced by fat, which is atrophied.

*Microscopic:* The lungs show only a slight congestion; no larvae were found.

The liver shows many areas of coagulation necrosis with extensive lymphocyte infiltration. There are also many healing scars showing proliferation of connective tissue and bile ducts. No larvae were found.

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## DIAGNOSIS OF DISEASES OF THE DUODENUM\*

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*Americus*

This brief paper will deal with the salient points in the diagnosis of diseases of the duodenum. Until recent years, diagnostic accuracy in this field has been like the duodenum itself—short. Recently some very sound work has been done in the study of duodenal lesions and we are gradually arriving at a better clinical and pathological classification of them. The physiologists are learning how a normal duodenum should behave and what influences it; the bacteriologists and chemists are telling us the nature of its normal and abnormal contents; and the pathologists are acquainting us with the actual tissue changes occurring with various types of duodenal disease.

It has been stated that we seldom find a thing unless we look for it. While we are looking for ulcer, cholecystitis, appendicitis, and other types of abdominal diseases, let us

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bear in mind the possible lesions to be found in the duodenum.

Any attempt at diagnosis of duodenal disease should comprise the following:

- (1) A carefully taken history, with special reference to epigastric burning or pain, fullness, hunger pains, abdominal colics, headaches, and qualitative food disturbances.
- (2) A thorough physical examination.
- (3) Careful x-ray examination of the entire gastro-intestinal tract and the gall bladder.
- (4) Analysis of gastric and duodenal contents if indicated.

It is important to remember that the duodenum, as well as the stomach, may be termed an abdominal alarm clock, giving symptoms of a reflex nature due to pathology elsewhere. This is frequently true of gall bladder disease and chronic appendicitis as there may be a duodenitis or duodenal irritability accompanying these conditions. Again, the duodenitis often manifested in patients with a heavy hookworm infection is a condition which Southern physicians are, I fear, too often prone to overlook. I recently saw such a case in which the symptoms resembled somewhat those of duodenal ulcer and somewhat those of colitis. Stool examination disclosed hookworm ova, and x-ray examination of the gastro intestinal tract showed an irritable duodenum with a colitis of the descending colon. Hookworm treatment relieved both group of symptoms.

In order to simplify this paper, I will take up under their respective headings the chief diagnostic points of various duodenal lesions.

#### *Duodenal Ulcer*

This is the most classical type of duodenal lesion and yet at the same time often misdiagnosed. Hunger pain with food ease, periods of discomfort followed by periods of apparent good health; alkali pain ease, and qualitative food disturbance most violent following the eating of condiments and rough foods, are the outstanding symptoms. Gastric acidity may or may not be increased. X-ray examination should show a demonstrable filling defect in the bulbous duodeni. Ulcer elsewhere in the duodenum is exceedingly difficult to demonstrate and often only indirect evidence, such as spasm or irritability can be

shown on screen or film. Not all ulcer niches are demonstrable and where failure to demonstrate such a defect occurs (if symptoms point very strongly to ulcer pathology, we are justified in using ulcer therapy.

#### *Duodenitis*

Judd and others have shown that a pathological entity known as duodenitis actually exists, in which there is an irritation and inflammation of the duodenal mucosa without actual ulcer formation. The symptoms may exactly simulate those of ulcer, even to the hunger pains and food ease, with alkali relief. In addition to the intrinsic lesion with actual mucosal inflammation, there is a form of irritability often reflexed from a cholecystitis, a gastric ulcer, a chronic appendix, or an intestinal parasite infection. The roentgen-ray picture may be the same in the actual and reflexed duodenitis, and consists mainly of an irritability of the bulbus duodeni or other portions, with rapid filling and emptying, and an irregular though constantly changing outline. There may even be pain or pressure over the duodenum while fluoroscopic the patient. Unless a constant, unchanging pocket, niche, or central speck can be demonstrated on all of the serial films, we are not justified in making a positive diagnosis of ulcer in these cases, although there are undoubtedly many cases of duodenitis diagnosed ulcer and vice versa. There is one diagnostic point, recently referred to by Kirklin, (1) i. e., gastric retention is very likely to occur in ulcer; in duodenitis it very rarely occurs.

In those patients in which a very irritable bulb is noted on x-ray examination, it is of value to give atropine, one seventy-fifth of a grain subcutaneously, and thirty minutes later examine the stomach under the fluoroscope. In cases where the irritability is reflexed from a distant pathological condition, atropine will usually relieve the irritability and permit of a smooth filling of the bulb.

#### *Periduodenitis*

A condition often co-existent with duodenitis is a periduodenitis. In this condition the serosa or peritoneal covering of the duodenum has become involved in the inflammatory process and adhesions are formed. This



may result in marked deformity of the bulb of such a nature as to stimulate cicatricial ulcer very closely and often a positive roentgen-ray differentiation is impossible. "The bulb seems to be writhing in agony while attempting to escape the grasping arms of the adhesions." To quote Duval et al.<sup>2</sup>, "You gain the impression instinctively during the various movements of the examination, that the wall of the digestive tube is intact and that it struggles more or less successfully against a peripheral obstacle which ensnares it." This phenomenon produces on film and screen a deformed, rapidly functioning bulb, with a fairly early gastric emptying time. The periduodenitis is often co-existent with a pericholecystitis, and may arise from the latter condition. It is of course susceptible of confusion with the adhesions around an old ulcer which has been subject to repeated small ruptures. As a rule, however, in cicatricial ulcer which has advanced sufficiently to obstruct gastric emptying, there is a smooth "cut-off" appearance of the pylorus, with an empty or sparsely filled bulb. The duodenitis periduodenitis cases usually present a more ragged outline and gastric retention is the exception rather than the rule.

It is in the last named conditions, duodenitis and periduodenitis, that gall bladder visualization is of marked importance. If we can show an irritable or deformed duodenum, and in addition a pathological gall bladder, then we are much more likely to be dealing with a combined cholecysto-duodenitis than with a cicatricial ulcer.

In addition to the bulbar irritability, the second and third portions of the duodenum may show irritability, as evidenced by spasm, hypermotility, and occasionally reverse peristalsis.

#### *Duodenal Ileus*

This condition has recently received much attention. The chief symptoms appear to be nausea; epigastric fullness relieved by upward manual pressure over the epigastrium, headaches, pain and fullness within an hour after eating, the fullness persisting for some two hours or more. We should suspect this condition in patients who present such a history, who are of the viscerotonic type, or

who have had appendectomy or cholecystectomy performed without relief of symptoms.

There are two main types, the anatomic occurring in thin patients from obstruction of the third portion of the duodenum by the mesenteric artery, and the pathologic, resulting from duodenal bands, meso-colic bands, and cicatricial tissue formation from duodenal or gastric lesions which have ruptured.

The diagnosis is made by x-ray, but when the duodenal contents show putrefaction, stagnant bile, and undigested food particles, we may suspect the condition. The x-ray findings are: Dilatation of the second, or both second and third portions of the duodenum, undue retention of barium meal in the duodenum, and reverse peristalsis originating from the point of obstruction.

#### *Diverticulitis*

Duodenal diverticula occur as pockets or pouches having a true communication with the duodenal lumen. They may be single or multiple, congenital or acquired. The diverticula may be the seat of an inflammatory process, or diverticulitis, in which case the symptoms may stimulate several upper abdominal conditions, i. e., duodenitis, ulcer, cholecystitis or cholelithiasis. Diverticula accompanying ulcers are fairly common, and the diverticulum may be on the wall opposite the ulcer. Cholelithiasis and duodenal diverticula are frequently found in the same person. For this reason cholecystography is indicated in all cases exhibiting diverticula. On the other hand, the diverticulum may exist simply as an anatomical anomaly, without symptoms, and we should be extremely careful to rule out all other possible causes of symptoms before recommending removal of the diverticulum. In one personal case, a diverticulum was found in the course of a routine x-ray examination of the gastro-intestinal tract, but proper treatment of advanced colonic stasis caused all symptoms to clear up.<sup>3</sup>

In the roentgen-ray examination of the duodenum, careful fluoroscopic study and films made in the right oblique position with the patient prone, are of definite aid in detecting presence of the diverticula. Care is to be used in differentiating diverticula from mere redundancies of the duodenal wall, ac-

cessory ulcer pockets, and barium lodged in the ampulla of Vater. Retention of barium in the diverticulum after the stomach is empty is of definite value in making a diagnosis.<sup>4</sup>

It has been said that patients having Meckel's diverticulum often present some other anatomical anomaly, such as six fingers, forked ribs, etc. Any patient with such anomalies who complains of abdominal pain should be considered as potentially having a gastrointestinal tract anomaly, whether it be a diverticulum, a left sided appendix, or a colonic deformity.

#### *Duodenal Neoplasms*

Malignancies arising in the duodenum are very difficult to detect on the x-ray film unless extensive, and even then we cannot justifiably say just what the original site was. The chief clinical symptoms which should cause us to suspect a malignancy are weakness, nausea, pain after meals and dark blood in stool. A mass is not always palpable. Rolleston<sup>5</sup> states that in carcinoma involving the region of the ampulla of Vater, the jaundice may be intermittent, in contrast to the progressive jaundice without remission, noted in carcinoma higher along the common duct.

The demonstration of a constant, irregular narrowing or deformity of the duodenum, coupled with symptoms of upper intestinal involvement, especially if a mass is palpable in the region of the duodenum, justify exploration on the basis of probable malignancy involving the duodenum. The most common malignancy involving the duodenum is that of carcinoma of the pancreatic head. In these cases the duodenal deformity may be due to neoplastic tissue in the duodenal wall itself, but is more commonly due to extrinsic pressure.

Benign neoplasms in the region of the pancreas and kidney, tumors of the retro-peritoneal lymphatics, such as lymphosarcoma and tabes mesenterica, (6) and aneurism of the abdominal aorta may also produce deformities in the duodenum. The chief points to be noted are widening of the arc of the duodenum, narrowing of the lumen, and displacement of the duodenum.

Recently, the literature has contained several reports of benign duodenal tumors, chiefly polypi, which were diagnosed on x-ray examination (7) (8) by demonstration of a central filling defect of the duodenal bulb. In some cases the polypi were situated in the stomach near the pylorus but extruded through the pylorus into the duodenum and there produced the central filling defect.

The above discussions are necessarily brief, their main purpose being to call attention to the variety of duodenal lesions which we may encounter and enumerate their outstanding diagnostic features.

In regard to the roentgenologic examination, I wish to stress the importance of looking for something else besides simple ulcer of the bulb; the value of serial films made in rapid succession; the necessity for careful fluoroscopic study in vertical and prone positions; and the routine use of the oblique position. By the use of this last named procedure we may often fill what appears otherwise to be a defective bulb, properly outline the loop of the duodenum, and detect small diverticula which are hidden by overlapping gastric shadows.

Finally, let me make a plea for more serious consideration of the problem of duodenal disease, for more painstaking examinations, and for a sane, conservative attitude in duodenal diagnosis. If x-ray studies demonstrate a duodenal defect, complete the examination of the entire gastro-intestinal tract, utilize the aid of cholecystography whenever practical, and consider the duodenum, not as a separate structure but as a part of the whole abdominal mechanism.

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## X-RAY THERAPY\*

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Macon

I appreciate very much the honor of being invited to read a paper before the First District Medical Society. It is always a pleasure to visit Savannah, and to make such a visit as the guest of this society is a double pleasure.

In the past few years since I have been interested in x-ray therapy, I have been surprised at the number of doctors who, well informed in other lines of work, are very skeptical of the value of x-ray therapy. There are a few who hold the uncompromising opinion that it is of no value at all. As is usually the case when some new therapeutic agent is discovered, when so-called "deep therapy" was first introduced ten or fifteen years ago, extravagant claims were made for it which have proved a disappointment to every one. However, as the chaff continues to blow away, the few real kernels of wheat are becoming more clearly seen and appreciated.

X-ray therapy may be divided into three more or less distinct fields of usefulness:

1. Dermatology.
2. Superficial caustic therapy.
3. Deep therapy.

In this paper I shall not touch upon dermatology. Superficial caustic therapy is probably the least important of the three groups, as most of the results obtained by this method can be accomplished equally well by the use of radium, surgery or one of the caustic pastes. For instance, epithelioma of the skin can be cured with a caustic dose of x-ray, but the cure is probably more easily accomplished with radium. I prefer radium in treatment of epithelioma of the lip, but Schreiner at the State Institute for the Study of Malignant Disease, in Buffalo, New York, who has a large quantity of radium at his disposal, prefers to use x-ray in these cases. X-ray is frequently the easiest and most desirable method of removing a sloughing, inoperable carcinoma of the breast. It avoids an operation, is practically painless, and in the course

of a few weeks, removes a foul, ulcerating mass, leaving a comparatively clean granulating wound which may completely heal over. The patients may ultimately die of metastases, but the removal of a foul, sloughing mass is a great relief and, in my opinion, is well worth while. This same palliative result can be obtained with zinc paste, but it is much more painful. Lee, at Memorial Hospital, in New York, uses zinc paste with these cases.

Any ulcerating carcinoma can be treated in the same way. I have recently treated an ulcerated malignant growth of the parotid with this caustic x-ray dosage. The tumor decreased markedly in size, the surface sloughed off, and skin completely covered the ulcerated area. When the patient was last seen, a new nodule had appeared below the ear and was ulcerated. So it is now being treated by the same method. So far, the facial nerve has not been affected. I believe that the nerve would inevitably have been destroyed, had a similar excision with the knife or cautery been attempted. The use of massive, unfiltered x-ray in treatment of ulcerated malignancies is very valuable and perhaps somewhat overlooked at the present time.

But with most of us, the chief interest in x-ray therapy is in the third group—the deep therapy. Here we have an agent different from all others, except radium, in that it is capable of penetrating through normal body tissues to a considerable depth without injury to these tissues and producing marked effect on tumor tissue lying hidden within the body. Just what results can be obtained by this method we will discuss later. As for the relative merits of x-ray and radium in deep therapy, there is still some discussion; and the opinion of the disputants has seemed to me to be greatly biased by which method was at the disposal of the different men. Most of the men who have large quantities of radium claim that their results are better with radium in deep therapy than with x-ray. Based on personal experience of several months in a large radium clinic and on a real effort to satisfy my own mind on this point by reviewing the literature a year or so ago, I came to the conclusion that if any difference in the two methods exists it is a very small

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one indeed. Perhaps the temporary response to properly applied deep radium therapy is a little more spectacular and the effect may last a trifle longer, but I have never seen any evidence that permanent cures are any more numerous. In any event, the very large quantity of radium necessary to apply deep therapy properly is available to relatively few people, and I believe that deep x-ray therapy properly applied gives as good results.

In benign conditions such as fibro-myomata of the uterus, uterine hemorrhage of unknown cause or due to hypertrophy of the endometrium, and in other conditions, deep x-ray therapy is of great value and permanently curative in selected cases.

Intra-mural and submucous uterine myomata up to the size of a three to four-month pregnancy can almost always be made to shrink so that the uterus returns to normal size bleeding stops and, if not absolutely curative, this control may be maintained almost indefinitely. Uterine bleeding due to hypertrophic endometritic may be controlled either temporarily or permanently, according to the doses given. This effect is indirectly produced by stopping the function of the ovaries. Similar results may be obtained in a number of other benign conditions.

But the phase of greatest interest in deep x-ray therapy is in the treatment of inaccessible, recurrent, metastatic and inoperable malignancy. Let me state at the outset that I have yet to see a conclusive, unquestionable, permanent cure of a deeply seated malignant disease by the use of deep x-ray or deep radiation with radium alone. A few such are reported, but they are so rare that I always wonder if the pathologist was not mistaken, or if the supposedly malignant metastatic glands were only inflammatory after all. The one case with which I am personally familiar is that of a tumor of the cecum surgically removed seven years ago. There were numerous hard glands in the mesentery of the ascending colon and in the lymphatic drainage pathways. The metastatic involvement was so great that the surgeon removed only the primary growth of the intestine in order to relieve the obstruction and did not touch the glands except those closest to the growth. Dr.

Mandlebaum, of Mt. Sinai Hospital, and Dr. Ewing, of New York, made a diagnosis of lymphosarcoma. The patient received heavy deep x-ray therapy over a period of two or three years. There is still a palpable mass almost the size of an egg in the region of the cecum, but he has had no x-ray treatment for three years, the mass has not increased in size, and he is perfectly well and at work every day.

Ewing groups tumors according to their relative radio-sensibility as follows:

1. Lymphoma: Lymphocytoma, lymphosarcoma, myeloma.
2. Embryonal tumor: Carcinoma of testis and ovary, basal-cell carcinoma.
3. Cellular anaplastic adult tumors, "round-cell" carcinoma, diffuse carcinoma.
4. Desmoplastic tumors: Carcinoma, simple, fibrocarcinoma, squamous carcinoma.
5. Adenocarcinoma: Uterus, intestine, breast.
6. Fibroblastic sarcoma: Osteosarcoma, neurosarcoma.

I will now discuss briefly each of these groups and cite illustrative cases:

1. Lymphoid group: Tumors arising from lymphoid tissue are the most sensitive to x-ray treatment. The simple hypertrophy of the thymus gland seen in infants, while not really malignant, may be considered with this group. Perhaps the most spectacular results seen in x-ray therapy are seen in this condition. The change within two or three days or a week from a blue, dyspnoeic, struggling infant who strangles when it tries to eat, to a comfortable child who breathes, eats and sleeps normally is truly miraculous. With only a few treatments, the improvement is permanent. The response of lymphosarcoma and leukemia is almost as spectacular but unfortunately it is only temporary. But to prolong life for months or years may be tremendously worth while. I have in mind a patient with lymphatic leukemia who came to us in March, 1927, so weak that he had to be assisted into the office. He had a general glandular enlargement and some enlargement of the spleen. His blood examination at that time showed hemoglobin 35 per cent, white blood count, 240,000. The differential count

showed about 99 per cent of the white cells to be abnormal lymphocytes. He was given a course of x-ray treatment and by May 15th his hemoglobin was 70 per cent, white blood count 12,000, and he had gained twenty-five pounds in weight. He was a farmer and when seen again in the fall he stated that he had plowed the fields and helped harvest his crop. It was a good year, and he paid the mortgage on his farm. Late in the fall he had a recurrence of symptoms and his W. B. C. was found to be above 100,000. He was given more x-ray treatment and this time we almost came to grief by being overzealous in treatment. Before we realized it, his white blood count had dropped to 5,000 and he was considerably prostrated. However, he reacted quickly and again did his share of the farm work in 1928 to his financial gain. In the fall of 1928 he had a relapse and this time he responded very poorly to treatment. He had been an invalid since February and he died only a day or so ago. We gave this man two years of useful, happy life.

2. Embryonal tumors: The response of basal cell epithelium or rodent ulcer of skin to treatment with radium is well known. It will respond to x-ray also, but I believe radium is the method of choice. Embryonal tumors of the ovary are rather rare. I recall a patient with extensive, massive, metastatic masses in the abdomen secondary to a tumor of the testicle which disappeared very quickly and completely under x-ray and deep radium therapy. However, it recurred within a few weeks and the patient died very quickly. One very spectacular case may have belonged to this group of ovarian tumors. The patient was an elderly woman who was almost moribund when first seen by us. She had been told a year or so before that she had a tumor on her ovary. When I saw her she had masses the size of oranges in the abdomen, a large liver and ascites. There seemed little hope, but to comfort the family, we gave her x-ray treatment. Her improvement was astonishing. She was able to leave the hospital in ten days and walked into the office a month later. With various remissions and relapses she lived for two years, able to do her housework and

work in the garden. The exact nature of the tumor was never determined.

3. *Cellular adult tumors*: This group is characterized by their highly cellular and frequently vascular structure and some care must be taken not to give too large doses, as central necrosis and sometimes hemorrhage may occur. I have under treatment now a man with an inoperable carcinoma of the thyroid. The growth has decreased perceptibly in size and he is having some relief from pressure symptoms, but the response is not nearly as satisfactory as in the two groups discussed above. Comparatively small doses are being given to avoid throwing the thyroid and parathyroids out of function, and also to avoid the danger of edema of the larynx. How long we will be able to hold this growth in check I do not know.

4. *Desmoplastic tumors*: Beginning with this group, we reach the tumors that are increasingly insensitive to x-ray therapy—the fibrocarcinoma and the squamous-cell carcinoma. Metastatic glands of the neck from a carcinoma of the lip are a good example. Implantation of radium seed into such glands followed by deep therapy is probably the best method of treatment. If only one gland is involved, much temporary good may be accomplished, but the more I see of massive metastatic involvement of the glands of the neck, the more skeptical of the value of intensive radiation I become. In the past year I have seen two cases in which large quantities of radium were implanted into the glands and massive deep radium and x-ray therapy were given. However, they were very little benefited, even temporarily, and were made miserable by the drying up of the salivary glands. I think that in cases of this type we are sometimes overzealous and that the attempted cure is as bad as the disease might have been.

5. *Adeno-carcinoma*: We have a patient with adeno-carcinoma of the fundus of the uterus diagnosed from curettings eighteen months ago, who refuses operation. X-ray from time to time has controlled the uterine hemorrhage and at least has been of that much benefit.

The value of pre and post-operative x-



ray treatment in cancer of the breast is an important question. In a recent careful review of some 1,200 parallel cases at the Mayo Clinic, the difference in length of life and in five year-cures between the cases operated upon and not treated by x-ray, and those operated upon and treated by x-ray was very small indeed. However, the difference was in favor of x-ray treatment. The exact figures are not at the moment available. Although the showing was not impressive, I feel that until it is proved of no value, we should give the patient the benefit of the doubt and the benefit of x-ray therapy.

6. *Fibroblastic sarcoma*: Universal experience is that sarcomata of this type and of the melanotic variety are most resistant to radiation. Even temporary palliation is rarely obtained.

Of course, in a paper of this length, only the high points can be touched upon and many things have to be left unsaid. I cannot close, however, without calling attention to the great relief from pain that can be obtained sometimes in cases with metastatic involvement of bones, particularly the spine. There is apparently very little change in the size or rate of growth of such metastases, but frequently the relief of pain and vomiting is most gratifying.

Deep x-ray therapy is a method of many pleasant surprises and of bitter disappointments, but in properly selected cases a great deal can be accomplished in otherwise hopeless conditions.

#### SUMMARY:

1. The general field of x-ray is reviewed.
2. In certain benign conditions x-ray therapy is of permanent curative value and of great palliative value.
3. Radiosensitive malignant tumors are greatly benefited temporarily, but permanent cures are almost never accomplished.
4. Destruction of ulcerating malignant lesions by heavy caustic unfiltered x-ray radiation is recommended.

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MEDICAL ASSOCIATION OF GEORGIA

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May 14, 15, 16, 1930.

## THE SPINAL MANOMETER AS AN AID IN DIAGNOSIS OF LATERAL SINUS THROMBOSIS

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*Review of a Case*

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*Atlanta*

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Diagnosis of lateral sinus thrombosis by the use of the spinal manometer was reported by Ayer and Tobey of Boston at the American Otological Society in 1925. Since then it has been used extensively at the Massachusetts Eye and Ear Infirmary and has proved, in my opinion, an accurate means of diagnosis when complete blocking of the sinus exists. The practical workings of this test are best described by E. W. Day (1) of Pittsburgh in the recent publication of Jackson and Coates: "With an occluding thrombus in one lateral sinus, the manometer reading will be higher than normal, approximately between 200 and 250 mm. If now firm pressure is made over the jugular vein of the occluded sinus there will be no change in the cerebral pressure. When pressure is made over the jugular vein of the free sinus, thus blocking both sinuses, one blocked by the clot, the other by pressure on the vein, there will be a marked and rapid increase of cerebral pressure, the fluid probably overflowing at the top of the tube. This is diagnostic of complete blockage of the sinus opposite to the one on which pressure is made. With a parietal clot, the finding will be less definite or very doubtful. This procedure is especially valuable in determining which sinus contains the clot, in cases of double suppurative otitis media.

"Caution: In making this test, complete relaxation of the patient is necessary; no struggling or holding the breath. It is best done under complete anesthesia. Pressure must not be maintained too long, or damage to the brain tissue may result."

The following case report is interesting within itself and also clearly demonstrates the practical value of the Tobey-Ayer Spinal Manometer Test as an aid in diagnosis

where the existence of lateral sinus thrombosis is suspected:

A sixteen-year-old school girl was admitted on the aural service of the Massachusetts Eye and Ear Infirmary. She complained of pain and discharge from her left ear for four weeks. She had enjoyed good health except for influenza at age six, complicated by otorrhea in the left ear which cleared up in about two weeks. She gives a history of occasional colds.

*Present Illness:* This began about four weeks ago following a cold. The otalgia has persisted, with only occasional short lapses. It seems to be growing steadily worse. A few hours following the onset of the otalgia the left ear began to discharge spontaneously. The discharge which is purulent, has been constantly present since. For the past three days it has been exceptionally profuse. Deafness and tinnitus have been present in the left ear for four weeks, with post-aural tenderness on left side for five days and slight post-aural swelling for one day. Two days after the onset of pain and discharge on the left side, otalgia developed, accompanied by spontaneous discharge on the right side. This persisted for about two weeks but has disappeared entirely in the last week. There has been a moderate amount of deafness on the right side until one week ago. She had no chills, but some sweats during the first two weeks. She has had mild temporal headaches for four weeks. There has been vertigo when sitting up for the past two days; objects seemed to swirl. Yesterday she experienced slight nausea with some vomiting which was not projectile. She felt jerky movements of the eye-balls one day ago. She had to lie on her back as to lie on either side caused dizziness. There is no definite history of fever.

*Physical Examination:* On the left there is marked post-aural tenderness with a moderate amount of edema. There is a profuse, purulent discharge from a large central perforation of the membrani tympani. No landmarks present. There is a moderate amount of drooping of the posterior canal wall on the left. There is no foul odor. On the right there is the picture of a resolving acute otitis media. No perforation is seen. There is no post-aural tenderness or edema. The hearing test is typical of conduction deafness on the left.

There is a high deviation of the nasal septum on the left, with a moderate amount of muco-purulent discharge in the middle meatus. The tonsils and adenoids have been well removed. The teeth are in good repair. There are no enlarged glands. The larynx

is negative. On trans-illumination the sinuses are clear. The heart and lungs are normal. There is no nystagmus. The discs appear normal. There is no stiff neck, no falling, no dizziness. Temperature 100; pulse 100; respiration 20.

The laboratory reports are: white blood count 12,600; red blood count 4,600,000. Hemoglobin 90 per cent. Differential Count: polymorphonuclears 76 per cent, lymphocytes 23 per cent. Urinalysis is negative.

Staphylococcus was cultured from the discharge of the left ear, the blood culture was negative after twenty-four hours. On Roentgen examination the right mastoid is completely sclerosed; the left mastoid is partially sclerosed with a small area of destruction around the antrum and toward the tip.

On the strength of the physical findings and the history, a left simple mastoid operation was performed one day after admission. After incision of the skin and retraction of the periosteum, the cortex, which was hard and sclerosed, was removed, and the antrum was located with some difficulty. The cells around the antrum were soft and filled with granulations, but there was no free pus. The remainder of the mastoid was sclerosed, excepting a few cells in the tip and over the lateral sinus plate, which were filled with granulations. The mastoid was carefully cleaned out. A small area of dura was exposed which looked healthy. A small area of the sinus was exposed, which appeared normal. An iodoform wick was inserted in the usual manner and the skin wound closed with silk worm gut sutures. The patient was returned to bed in good condition.

She made good progress until two days following operation, when her temperature rapidly rose to 105, with four to six-hour remissions to 100, with pulse 140; respiration 30. The blood culture remained negative after 48 hours. She had one light chill shortly after the elevation in temperature. The medical and neurologic consultants were called; the results of their examinations were negative. The ophthalmologist found slight blurring of both discs on the nasal side, but no engorgement of the vessels. The discs were within normal limits. The white blood count at this time was 7,000. The blood culture was negative after 48 hours' growth.

The Tobey-Ayer Spinal Manometer Test was done with the following readings:

Initial Pressure	200
Compress Left Jugular	240
Release Left Jugular	230
Compress Right Jugular	600



Release Right Jugular.....	170
Compress Both Jugulars.....	600
Release Left Jugular.....	600
Release Right Jugular.....	190
Final Pressure (after withdrawal of fluid) .....	90

## CRETINISM\*

## CASE REPORT

WM. WILLIS ANDERSON, M.D.

*Atlanta*

This proved conclusively that the left lateral sinus was completely blocked. Ligation of the left internal jugular vein was resorted to immediately. The usual procedure was followed in this operation, the vein being exposed without difficulty and ligated twice about 6 cm. below the bulb with No. 1 Chromic Gut. The wound was closed with silk sutures. The mastoid wound was reopened and the lateral sinus was exposed from the knee to the bulb. It was packed above and below with iodoform gauze plugs before incising. The sinus was opened with a scalpel. The lower plug was removed and no bleeding occurred. The upper plug was removed and free bleeding occurred. The upper plug was tightly replaced to control the bleeding. The clots below were removed with a dull spoon curette until free bleeding occurred. A window about 4 cm. in diameter was removed from the sinus wall. After removing all plugs the sinus was packed off with iodoform gauze through the mastoid wound. The skin incision was left open.

Twenty-four hours following operation the blood culture was taken and, after 72 hours, was reported positive for streptococcus. The following morning a transfusion of 500 cc. of whole blood was given.

The temperature remained high for five days following operation and another positive blood culture was reported. The patient was transfused again with 500 cc. of whole blood. Subsequent cultures were sterile and her convalescence was uneventful and typical of this type of case. The post-aural wound was later closed under gas anesthesia to give a good cosmetic result. The patient was discharged from the Infirmary cured, five weeks from the date of admission.

## NEW AND ESSENTIAL POINT IN BLOCKING OF INTERNAL LARYNGEAL NERVE

Lawrence Schlenker, St. Louis (Journal A. M. A., Dec. 14, 1929), says that the essential point in successful blocking of the laryngeal nerve is the bringing of the solution into intimate contact with the nerve, to accomplish which the fluid must be deposited in the exact plane of tissue in which the nerve lies. By piercing the thyrohyoid membrane, this objective is most certainly attained and a relief secured which is immediate and complete, or practically complete.

J. P., a six year old, white child, living in a small town about thirty miles from Atlanta, applied for examination at the Wesley Memorial Hospital on April 18, 1929. Since her condition had gone unrecognized over a period of years and since she responded so well to treatment, her record is given below:

Chief Complaint: "She has not grown any in three years."

Family History: History obtained from her mother and father.

Father living and well, 30 years of age. Mother living and well, 28 years of age. There was no history of tuberculosis, renal or heart disease in the family. There were no dwarfs or giants in the family.

Two other children living and well.

Her three year old sister was brought along for comparison. (Fig. 1).

Past History: Birth: Term, normal delivery, not weighed but said to have been an average size baby.

Infancy: She cried spontaneously and nursed well. She was always well as an infant. She has had no snuffles.

Feeding: She was breast fed for fifteen months, then weaned entirely.

Afterwards she was fed on raw cow's milk, vegetables, fruits, cereals, orange juice. At the time of the examination she was eating regular adult diet, but taking very little milk.

Acute Infectious Diseases: She had chicken-pox at one year of age without any complications. She has had no other infectious diseases.

Development: Her birth weight and subsequent weights were not accurately known. Her mother thought she had developed normally until about one year of age, after which her development seemed to have been retarded. She was said to have remained at a stationary weight for the past three years. She cut her first tooth about one year of age. She walked at fifteen months of age. She began talking at fifteen months of age, being able to say short sentences at eighteen months of age.

\*Read before the Fulton County Medical Society, Atlanta, Ga., September 5, 1929.





Figure 1.

Cretin, six years of age, compared with her three year old sister, the larger of the two.



Figure 2.

Same patient. Note dull, apathetic expression, thick lips and nose with sunken bridge; and coarse, light, dry hair.

**Cardio-Respiratory:** At three years of age she had a "running ear." This ruptured spontaneously and discharged for a week or so. She was not subject to frequent colds. No cough. No loss of weight.

**Gastro-Intestinal:** Appetite fair; bowels moved once or twice a day.

**Genito-Urinary:** She did not wet the bed at night. She had never had any bladder or kidney trouble.

**Nervous:** She was dull, stupid, and occasionally showed a temper. She usually played well with the other children.

**Present Illness:** Her father said she had not grown any in 3 years.

**Physical Examination:**

Patient:	Patient's 3 year old sister	
Weight: 30½ lbs.	43 lbs.	38½ lbs.
Height: 34½ in.	43½ in.	41½ in.

**General:** She was dull, apathetic, afraid of examiner. She was very small of size, with coarse yellow hair, thick pudgy lips and nose, and a brownish pigmentation of her skin. The bridge of her nose was almost flat. (See Fig. 2).

**Head:** The head was round and fairly regular in outline. The anterior fontanel was patent, admitting 2 finger tips. The hair was dry. Her pupils were equal and reacted to light and accom-

modation. Throat, ears and nose were negative.

**Skin:** The skin was brownish in color, the discoloration being most marked over the exposed surfaces. No skin rashes.

**Glands:** There was no general glandular enlargement.

**Chest:** Normal cardiac dullness. Normal percussion and auscultation of lungs.

**Abdomen:** The abdomen was pot-bellied (see Fig. 1). The edge of the liver was felt two finger breadths below the costal margin in the right mammary line. It was smooth and regular. The spleen was not palpable. There was a reducible umbilical hernia protruding one-half inch. It admitted the tip of the forefinger.

**Genitals:** No vaginal discharge.

**Extremities:** The hands were thick and pudgy, but did not resemble the trident hand. Knee jerks, biceps, triceps and umbilical reflexes were all present and equal on both sides.

**Impression:** Cretinism.

**Laboratory Examinations:**

Red blood cells: 3,250,000.

White blood cells: 9,100.

Hemoglobin: (Dare) 65%.



Figure III.

Note retarded bony development. Compare with normal hand of same age below.

Differential:

Polys: 31%.

Small mono: 64%.

• Large mono: 5%.

Blood Wasserman: Negative.

X-ray examination of hands for bony development: Her hands showed a bony development equal to that of about one or two years of age. Only a small center of one carpal bone was present, (see Fig. 3). Normally at this age she should have had six or seven centers well developed, (see Fig. 4). The radial epiphysis was also markedly retarded in development, while the ulnar epiphysis had not appeared. None of the epiphyses for the metacarpals or phalanges had appeared.

Roentgenological Conclusions: Marked retardation in bony development. Her bone age was about one and a half years.

Treatment: On account of the patient being in the out-patient department, it was thought wise to begin with very small doses of thyroid extract in order to determine her tolerance. Consequently, she was put on one-tenth of a



Figure IV.  
Normal hand for comparison.

grain a day, increasing according to the following schedule, each one of the figures representing one-tenth of a grain, (Burroughs and Welcon).

	Tu.	We.	Th.	Fri.	Sa.	Su.	Mo.
Breakfast:	1	2	2	2	3	3	3
Dinner:	1	1	2	2	2	3	3
Supper:	1	1	1	2	2	2	3

Progress Notes: April 22, 1929: Her facial expression seemed brighter, even on such small doses of thyroid. Her father stated that she was much improved, and had a better appetite. There had been no unusual signs of increased nervousness or irritability. She was to increase the thyroid dosage to eight tablets of one-tenth of a grain three times a day. Weight: 30  $\frac{3}{4}$  lbs. Height: 34  $\frac{1}{2}$  in. April 29, 1929: 30 lbs., 34  $\frac{1}{2}$  inches. She was taking almost three grains of thyroid a day without any trouble. She was given a scale up to six grains a day, as follows, each of the figures representing one-half grain of thyroid:

Tuesday

	Tu.	We.	Th.	Fri.	Sa.	Su.	Mo.
Breakfast:	2	3	3	3	4	4	4
Dinner:	2	2	3	3	3	4	4
Supper:	2	2	2	3	3	3	4

May 9, 1929: On Sunday, taking al-



most six grains of thyroid a day, she became very nervous and did not sleep well at night. Medication was discontinued, according to previous instruction, and after 2 days she began taking three one-half grain tablets three times a day.

May 19, 1929: 30 lbs., 34½ inches. She had no thyroid for the past two or three days because her father could not come in town. Her color and facial expression were changing.

June 3, 1929: 30 lbs., 36 inches, a growth of an inch and a half in six weeks. For the first time in a year she laughed spontaneously when her father told her he was going to bring her to town. A single daily dose of one tablet of five grains was begun.

July 15, 1929: 30½ lbs., 37 inches. Condition good.

August 21, 1929: 37½ inches, 30½ lbs.

#### *Comment:*

There are several ways of measuring dosages of thyroid. Talbot, of Boston, reports that cretins consistently show a basal metabolism of 15 to 20 per cent below zero. He gives his patients enough thyroid to increase their metabolism to normal, and feels that a new reading should be made every year or so, and the dosage of thyroid adjusted accordingly. His patients are examined in a large respiratory chamber. It is doubtful whether the usual reading made from a mask fitting over a child's face, whose mentality is markedly delayed and who is so cross and irritable that it is difficult to examine her, would be of much actual benefit. It is possible that only misleading data might be obtained.

Patients may be given small, increasing doses of thyroid, and the clinical results noted. When they begin to show signs of overdosage, i. e., tachycardia, extreme nervousness, restlessness and inability to sleep at night, the dose may be discontinued and, after a day or so, a slightly smaller dose administered. There is always discussion as to which particular brand of thyroid to use, but if this scheme is followed and the same make of thyroid used at all times, it will be found safe. This patient's tolerance was found to be about six grains a day. On taking five grains a day, after a period of three years in

which she had not grown in height at all, she grew almost an inch a month, this being approximately ten times a normal growth.

Cretinism usually does not become apparent until artificial feeding is begun. As long as these infants are nursed, these symptoms either do not appear or do not develop completely, as sufficient thyroid secretion reaches them through their mother's milk. On the other hand, the earlier the treatment is begun, the better prognosis the child will have. Although thyroid orally administered throughout the life of the patients, usually changes the entire make-up of these individuals, a guarded prognosis must be given. It is doubtful whether they quite measure up in mentality to other normal individuals.

The following story is current in one of the clinics where a cretin was under observation. After the patient failed to report for observation over a period of months, a social service worker was sent to visit the home and find out what had become of the child. She found him lying on the floor behind the kitchen stove. On inquiring of the mother as to why she had discontinued giving him thyroid when such good results were being obtained, the mother replied that she had kept up treatment for quite a while, but she found out that it made the child so active that it was much easier for her to leave off the thyroid and let him hang around the kitchen where she could watch him.

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## THE EYES AS A CAUSE OF HEADACHES\*

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Headache is one of the most universal and frequent symptoms complained of, and as such it concerns nearly all of us regardless of

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what branch of medicine we are in. Headache is a symptom and not a disease and may be produced by so many conditions, obscure and remote, as well as those more evident. Much has been written on the subject and patent medicine venders have become rich, quacks and cults have reaped a harvest and headaches continue to be just as common in our present day hypertensive lives.

Such terms as biliousness and acidity have shielded many a doctor and temporarily satisfied the patient. After these terms had become a by-word they were supplanted by focal infection and toxic condition and the patient must be content that he has auto-intoxication or should have his teeth and tonsils out.

It is impossible to enumerate the many causes of headaches, but it may be well to mention some which are most common, namely, eyes, gastro-intestinal upset, migraine, sinusitis, cerebral arterio-sclerosis, nephritis, brain tumors, etc. I wish to emphasize the importance of eye-strain as a causative factor and more particularly one phase of this, namely, muscle imbalance which is so commonly and widely overlooked by the oculists themselves.

Every patient suffering from headaches for which we are not able to find a definite cause should have a careful eye examination. This should be made by a capable oculist, one who is trained in medicine and understands the relation of the eyes to general or constitutional diseases. He must always have several possibilities in mind, the most important of which is the presence of glaucoma simplex, because this may account for dull aching pains usually over the brow which may be worse at night or early morning because the pupils dilate during sleep and the introocular tension rises in cases of glaucoma or potential glaucoma. Conditions which might produce similar symptoms are sinusitis, and nephritis, both giving early morning headache.

Refractive errors, particularly astigmatic, often cause headaches. Small errors often produce some of the most constant symptoms and yet the vision may be normal. This is true especially of hyperopic astigmatism off-axis.

Muscle imbalances account for many of the unrelieved and constant headaches. The pain is often referred to the back of the neck. The usual history is that the patient has had frequent changes of glasses and the internist and rhinologist are unable to find any cause. Such patients often have a hyperphoria (one eye has a tendency to turn up) and this can be detected by means of a phorometer and latent cases can be brought out by occluding one eye for 24 hours. These patients can be relieved by incorporating a prism in the lenses. There are other muscle imbalances which likewise produce headaches and pains in the neck, but these are too technical to mention here.

Brain tumor is often first suspected after a fundus examination and often confirmed by perimetric findings. A fundus examination may reveal a retinal arterio-sclerosis and this is an important factor in giving a prognosis in the cases of cardio-vascular-renal disease.

When one consults an oculist for poor vision, eyestrain or headaches, it is not merely the question of prescribing glasses. The poor vision may be due to refractive error, glaucoma, intra-ocular tumor, cataracts, retinitis, optic neuritis, tabes, multiple sclerosis, arterio-sclerosis, brain tumor, etc. As some have said, the tongue is a mirror reflecting the condition of the stomach the eyes often show the first indication of some more distant affection.

Sixty-five years ago when Donders published his work on "Accommodation and Refraction of the Eye," eyestrain was not fully appreciated and many were prejudiced against glasses. Today in our highly advanced stage of development and sedentary lives we depend more upon our eyes and use them more than our grandfathers did. Presbyopia, that progressive visual disability accompanying age, is now better understood and we realize that every one who has reached the age of about 45 needs lenses for near or distant use or both. This is a physiological process and we must accept it.

In conclusion, I wish to impress upon the profession the importance of a careful eye examination in all cases of headaches and this not only refers to errors of refraction but muscle imbalance which is so often the cause and so often overlooked.

## SKIN CANCER\*

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Eighteen hundred years ago, Rufus of Ephesus, an eclectic physician wrote the first accurate description of skin cancer. The older Egyptian and Indian medicine men recognized cancers and had treated them successfully by excision and escharotics. Hippocrates received much descriptive matter about cancer from his predecessors, but diagnosis was still uncertain when he burned out a cancer of the neck. At the beginning of the 16th century, Galen's humoral pathology still prevailed, and although sundry fantastic theories of the nature of cancer had been propounded, there had been little or no advance in real knowledge. Much was done with the crude microscopes of the 16th and 17th centuries to challenge Galen's pathology, but it was not until 1824 when the achromatic microscope appeared, that the modern conception of cancer began. After Schwann established his doctrine of cellular structure, the researches of Mueller, Virchow, Thiersch, and Wauldeyer gave us the basis of cancer pathology. The subsequent development of radium and roentgen-ray, and the fine work of Maude Slye and others have brought to us the modern conception of cancer, viz: *a malignant tumor of atypical and destructive proliferation of normal cells, brought about by as yet unknown agents, but probably by chronic irritation, in a predisposed individual.*

The distinguishing features of malignant tumors are infiltrative growth, local destruction, recurrence after removal, formation of metastases, interference with function, and general toxic action. Fortunately the large majority of skin cancers have only the first, second or third of these characteristics, and only few have possibilities of all.

A skin cancer, epithelioma or epidermoid carcinoma, is a malignant tumor, characterized by atypical and destructive proliferation

of the epithelium. General usage allows employment of the term epithelioma to distinguish cancer of the skin from carcinoma or cancer of other organs. In this meaning the term epithelioma is herein used.

Pathologically epitheliomas are divided into three types; (1) highly malignant or squamous-cell epithelioma, (2) potentially malignant or transitional-cell epithelioma and (3) locally malignant or basal-cell epithelioma. These three types have wide variations in malignancy and thus treatment and prognosis rests upon a clinical differentiation of these types. Clinically we may neglect the transitional cell cancer since it is well nigh impossible to recognize this type even by microscopic examination. So we must deal with the two extremes of cancer. Important as it is to distinguish these tumors clinically and diverse as their characteristics may be, it is frequently difficult to tell one from the other, and good clinical judgment matured by wide experience is necessary.

Although the histological types of epithelioma are quite definite, separation of these types on their physical appearance is by no means simple and it is difficult to present a description which will distinguish the highly malignant from the locally malignant. The terms "highly malignant" and "locally malignant" are used relatively because all epitheliomas may metastasize and produce death.

All epitheliomas have certain features in common. They usually begin from a small superficial plate of skin, or a roughened or warty keratotic patch. The seborrheic keratosis of the lip or forehead is a common example. Some epitheliomas, notably of the lip, are first seen as small firm, reddish or translucent nodules. The growing infiltrating epithelium usually destroys the blood supply and necrosis and ulceration appear, which may heal and ulcerate again, creating a false impression of soundness.

Some epitheliomas grow laterally, invading only the upper portion of the subcutaneous tissue, producing superficial ulceration quickly and frequently leaving scar tissue behind. This type, known as the rodent ulcer, usually appears on the cheek, nose or forehead and is rarely other than locally malignant.

\*Read before the Chattahoochee Valley Medical and Surgical Association, Dothan, Ala., July 9, 10, 1929.

nant. In its typical form it may be likened to a button, having an oval or round, rolled, translucent border surrounding a scaled or open ulcer. This type of epithelioma is relatively rapid in its growth.

Other epitheliomas grow deep, penetrating far into the subcutaneous tissue, and are slow to ulcerate. This type is usually highly malignant and goes unrecognized by patient or physician until metastases have occurred. It may grow as a small rounded or cauliflower-like tumor, becoming very large before ulceration occurs. The ulceration of either type has no characteristic appearance, except that in the locally malignant epithelioma the ulcer is usually surrounded by an elevated pearly border.

One cannot be dogmatic about cancer, but as a general rule from a diagnostic standpoint the following statements are true:

1. Epitheliomas appearing on mucous surfaces or at a muco-cutaneous junction are of highly malignant type.

2. Epitheliomas of the face appearing below a line connecting the corner of the mouth with the external auditory canal are of the highly malignant type. Those above this line are only locally malignant.

3. Epitheliomas of the genitals are highly malignant while those of the body are only locally malignant.

4. Epitheliomas of the hand while generally highly malignant, are if on the ulnar side of the hand, less likely to metastasize early.

These statements are made by no means inflexible and each case is a rule unto itself.

Thorough and complete destruction is the only rational treatment of skin cancer. Methods other than local destruction have been advocated. Among these is intravenous injection of metallic lead or of gold, and use of "Kochs' Serum." The metals have been found useless and Kochs' Serum is only mentioned to be condemned. The three generally recognized types of local destructive agents are, (1) excision, (2) radiation, and (3) cauterization. All three methods have good points but they also have some bad points that we must consider before using them.

In the hands of a good plastic surgeon, ex-

cision of a locally malignant epithelioma of the forehead may be done with good cosmetic results and the thoroughgoing surgeon may remove a highly malignant epithelioma of the lip followed a good functional result. But difficulties may arise in the use of surgery. First, surgical excision requires as a minimum a great deal of preparation of the patient even for a small lesion and the result may be more disfiguring than by other methods. Operation for removal of cancer of the lower lip necessitates the risk of a major operation for patients which are on the average poor operative risks. There are, however, many instances in which surgical removal is absolutely indicated, especially for comparatively young individuals with highly malignant type of epithelioma.

Radiation of skin cancer may be applied either with radium or roentgen-ray. The relative position of these agents in the treatment of cancer is still somewhat doubtful. The minimal lethal dose required to kill cancer cells is not so definitely known that destruction of normal cells can be prevented. Radiation will undoubtedly destroy a malignant growth with good immediate result, but the effect may continue, producing a radiodermatitis, in itself a precancerous lesion. The harmless appearance and the easy use of these agents, make them appear too useful and simple, and one must always guard against over-enthusiasm. Of the two agents, radium and roentgen x-ray, the latter is probably more useful in the treatment of skin cancer since the dose can be more accurately estimated.

Cauterization of skin cancer has been used for centuries with good results and is still held in high regard. The ideal method is by the use of controlled heat. This type of cauterization is done best with the high frequency oscillating current, applied with little or no preparation of cautery or patient. Treatment of the small locally malignant epithelioma by this method is followed by uniformly good results and the instrument has come to be an essential part of every dermatologist's office. Clark, Phfahler and others recommend its use in highly malignant



epitheliomas of the lip and especially in malignant tumors arising in radiation burns. Its application too widely in treatment of skin cancer is its greatest danger. Other methods of cauterization have been used with some success. The use of caustics and acids is held in high regard by many and they are undoubtedly curative when used properly. The main drawback to their use is that they may only stimulate and not destroy, especially if used too carefully. Their use in the highly malignant epithelioma is contra-indicated and ability to distinguish locally malignant from highly malignant epithelioma is in this instance paramount.

It would seem that the rational treatment of skin cancer involves the use of all three of these agents. It involves the choice of the treatment most applicable to the particular case, after due consideration of the location and type of the cancer to be treated, and of the physical condition of the patient.

The patient with skin cancer is deserving of, first, an accurate diagnosis, second, consideration of his physical condition, and, third, rational and appropriate treatment so that he may expect a good functional and cosmetic result.

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## A CONSIDERATION OF THE DUAL ROLE OF THE GONOCOCCUS

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In the identification of the gonococci it has practically long been given as a postulate that they be seen as intracellular forms in contradistinction to like forms appearing extracellularly. No doubt this attitude has obtained through the desire on the part of examiners and laboratory workers to make more certain and indisputable the "positive" bacteriological report when such is the verdict. This is especially so in those instances which have a medico-legal aspect.

However, experience teaches us that in the frank cases of acute gonorrhoeal infection the gonococci organisms, as a rule, are seen in

preponderating numbers intracellularly; while in the chronic cases of definite, specific history the organisms also frequently appear extracellularly as well,—in MANY instances the extracellular organisms appearing in greater numbers. In proportion to greater chronicity the Gram-negative diplococci—present or showing in relatively increased numbers—are the extracellular forms. That a microscopical examination fails to reveal any Gram-negative diplococci whatsoever quite frequently occurs; while subsequent continued examinations often disclose the presence of the characteristic organisms playing the extracellular role—and, still later, persistent examinations may, though not so frequently, reveal intracellular Gram-negative organisms also.

Therefore the classification, "intracellular" or "extracellular," in so far as the differentiation or actual identification of the organisms is concerned is too finely spun and unsound. Consequently this arbitrary attitude is unsafe from the standpoint of protection to the patient and to the family of the patient, for observing such an artificial distinction jeopardizes the safety of individuals, especially in the endocervical, tubal and the prostatic cases. As to the stage of gonorrhoeal inflammation in which the intracellular organisms are more often found and identified, I believe it is safe to say that almost invariably they are evidence of a more or less recently acquired primary infection, or a more or less freshly established secondary infection by direct extension or transference to another membranous site or sites from the site of the primary infection. My experience confirms my belief that the instances of chronic gonorrhoeal infection in which the extracellular Gram-negative diplococci preponderate, or are found alone, far outnumber the absolutely frank acute or subacute cases of gonorrhoea in which the intracellular forms appear alone.

In the face of a diagnosis of gonorrhoea given in a rather negative manner simply because the organisms happen to be found lying extracellularly, patients in such cases certainly cannot be expected to lend themselves to appropriate, protracted treatment and give full

measure of cooperation, both of which are necessary for the complete eradication of this infection in every case. How, otherwise, could we expect to extend appropriate measures of treatment in cases similar to the following:

(1) Miss S. Unmarried. Nullipara. Recurrent vulvo-vaginal abscess (left side). Subacute endocervicitis with moderate amount of endocervical discharge. Endocervical smears: presence of extracellular Gram-negative diplococci. Gland extirpated. Declined further treatment. Shortly thereafter married and left Atlanta. Returned for treatment 18 months later in an hysterical state, suffering with agonizing bladder pains. Catheterized urine: centrifugalized specimen revealing intracellular and extracellular Gram-negative diplococci. After five weeks of treatment here she was compelled to leave Atlanta for her home. With an adequate case history she was referred to a doctor in her home city for further treatment—if deemed necessary. Shortly thereafter from her home information was received that bacteriological examinations, both of her and her husband eight days later failed to reveal the organisms in either guise. I do not believe that I effected complete eradication in this instance in that period of time.

(2) Mrs. G. Primipara. Chronic endocervicitis, subacute appendicitis, pyosalpinx (right and left), enormous cervical and uterine hypertrophy. Endocervical smears: extracellular Gram-negative diplococci. Appendectomy, salpingo-oophorectomy (right), salpingectomy with partial oophorectomy (left). Smears from tubal pus: presence of intracellular and extracellular Gram-negative diplococci.

Mr. G. No subjective symptoms. History of gonorrhoea before marriage. Prostatic strippings: extracellular Gram-negative diplococci.

(3) Mrs. C. Multipara. Enormous cervical and uterine hypertrophy, extensive cervical erosion with deep ulceration, menorrhagia. Endocervical smears: extracellular Gram-negative diplococci.

Mr. C. No subjective symptoms. Denied history of gonorrhoea. Prostatic strippings: intracellular and extracellular Gram-negative diplococci. Confronted with this evidence the husband then admitted infection since marriage.

(4) Mrs. S. A history of gonorrheal infection and criminal abortion prior to marriage. Chronic endocervicitis. Moderately large degree of cervical and uterine hypertrophy. Endocervical smears: extracellular Gram-negative diplococci.

Mr. S. Shortly after marriage the husband developed orchiditis. Scant, thin urethral discharge. No frank gonorrhoeal discharge. Prostatic strippings: intracellular and extracellular Gram-negative diplococci.

(5) Mrs. G. Pregnant. Primipara. Chronic endocervicitis. Chronic cystitis. Endocervical smears: extracellular Gram-negative diplococci. Catheterized bladder urin: extracellular Gram-negative diplococci.

Mr. G. No subjective symptoms. History of gonorrhoea before marriage. Prostatic strippings: extracellular Gram-negative diplococci. In a consultation, a diagnosis of gonorrhoeal infection was given in both cases. The wife was treated conservatively during pregnancy. Post-partum: appropriate treatment instituted but a trip to another state interrupted treatment. The husband postponed treatment. While away from Atlanta he was informed that he did not have gonorrhoeal infection of the prostate. His case rested on this assurance for 5 years and 5 months when the couple returned to this city, the wife suffering with periurethral abscess, acutely inflamed cervix uteri, enormous uterine hypertrophy and acutely inflamed urinary bladder. ON RETURN: examination of Mrs. G.—endocervical smears: extracellular Gram-negative diplococci. Catheterized specimen of urine and urethral smears: Intracellular and extracellular Gram-negative diplococci. ON RETURN: examination of husband—no subjective symptoms. Examination of urine: tripper-faden in enormous numbers. Prostatic strippings: extracellular Gram-negative diplococci.

(6) Mrs. C. Multipara. Chronic endocervicitis. Enormous cervical and uterine hypertrophy. Moderate erosion of cervix. Classical chronic endocervicitis. Endocervical smears: extracellular Gram-negative diplococci.

Mr. C. No subjective symptoms. History of infection before marriage. Prostatic strippings: few intracellular Gram-negative diplococci; many extracellular Gram-negative diplococci. Many streptococci.

(7) Mrs. McG. Multipara. Enormous cervical and uterine hypertrophy. Profuse pustular endocervical discharge with cervical erosion. Menorrhagia. Endocervical smears: few extracellular Gram-negative diplococci.

Mr. McG. No subjective symptoms. History of infection prior to marriage. Prostatic strippings: a few extracellular Gram-negative diplococci.

(8) Mrs. G. Multipara. Enormous cervical and uterine hypertrophy, moderate cervical erosion, subacute inflammation of



vagina and cervix. Cervical smears: intracellular Gram-negative diplococci.

Mr. G. No subjective symptoms. History of infection before marriage. Prostatic strippings: a few pus cells, a few extracellular Gram-negative diplococci.

(9) Mrs. M. Nullipara. Slight hypertrophy of the cervix uteri, profuse muco-purulent endocervical discharge. Salpingitis (right). Endocervical smears: extracellular Gram-negative diplococci.

Mr. M. A man of unimpeachable integrity with no subjective history whatsoever save 1 to 1½ years previously at times sensations referable to the region of the prostate gland. Prostatic strippings: intracellular and extracellular Gram-negative diplococci. A few pus cells and a few tripperfaden.

(10) Mrs. S. Primipara. Moderately large degree of cervical and uterine hypertrophy. Acutely inflamed condition; moderate erosion with slight ulceration of the cervix; acute cystitis of the urinary bladder. Endocervical smears: intracellular and extracellular Gram-negative diplococci.

Mr. S. No subjective symptoms. History of gonorrhoea (from very furtive manner would judge since marriage). Prostatic strippings: a few pus cells, a few tripperfaden and many extracellular Gram-negative diplococci.

(11) Mrs. J. Multipara. Enormous cervical and uterine hypertrophy, extensive cervical erosion with moderately deep ulceration of the cervix. Chronically inflamed condition. Endocervical smears: occasional extracellular Gram-negative diplococci.

Mr. J. No subjective symptoms. No history of gonorrhoea. Prostatic strippings: extracellular Gram-negative diplococci, a few pus cells, a few tripperfaden.

(12) Mrs. L. Nullipara. Slight cervical and uterine hypertrophy, very profuse purulent endocervical discharge, slight cervical erosion, condition subacutely inflamed, right salpingitis. Endocervical smears: a few intracellular Gram-negative diplococci, many extracellular Gram-negative diplococci.

Mr. L. No subjective symptoms. History of infection before marriage. Urinary sediment: enormous numbers of pus cells and tripperfaden. Prostatic strippings: extracellular Gram-negative diplococci.

(13) Mrs. H. Primipara. Moderately large degree of cervical and uterine hypertrophy. Moderately extensive cervical erosion, subacutely inflamed. Salpingitis (right). Endocervical smears: intracellular and extracellular Gram-negative diplococci.

Mr. H. No subjective symptoms. History of infection before marriage. Urinary sediment: a few pus cells and tripperfaden. Pros-

tatic strippings: extracellular Gram-negative diplococci.

(14) Mrs. A. Multipara. Enormous cervical and uterine hypertrophy, moderately extensive cervical erosion, profuse purulent endocervical discharge. Chronic endocervicitis and endometritis, salpingitis (right), subacute. Endocervical smears: intracellular and extracellular Gram-negative diplococci.

Mr. A. No subjective symptoms. History of gonorrhoeal infection before marriage. Prostatic strippings: occasional pus cells and a few extracellular Gram-negative diplococci.

(15) Mrs. J. Nullipara. Moderate degree of cervical and uterine hypertrophy with moderately large area of cervical erosion and slight cervical ulceration. Subacute endocervicitis, and salpingitis of both sides (more emphasized in the right side) with apparent thickening or slight mass on palpation in the region of the right tube. Endocervical smears: many intracellular and extracellular Gram-negative diplococci.

Mr. J. No subjective symptoms. History of gonorrhoea 8 years previous to marriage. Urinary sediment: few tripperfaden, a few pus cells and a few extracellular Gram-negative diplococci.

Other citations could be given.

Each instance of gonorrhoeal infection in a married person almost invariably leads to finding infection in the mate: consequently we have an additional individual to examine at least—if not to treat.

In every instance that opportunity offers for the examination of prostates and cervixes the results of such examinations will, if taken advantage of, convince us, I believe, beyond doubt of the more universal existence of this infection and of its greater persistence and obstinacy to eradication than is even now recognized and admitted,—if its appearance in the extracellular guise is constantly and seriously considered as it should be. In some of these cases, according to the condition, and circumstances surrounding them, a consultation may be advisable for the satisfaction of all concerned. This will also serve to protect the examiner. While the extracellular guise may indicate attenuation in so far as paroxysmal activity or reactivity on the part of the organism or process is concerned, it certainly cannot be said and supported by evidence that its viability in natural media, its obstinacy and its irritative nature are pro-



portionately reduced. It has been my experience that the extracellular Gram-negative diplococcus is more obstinate, tenacious and chronically irritative than the same organism in the intracellular guise. During treatment, the patient should be impressed with the deceptive, obstinate, persistent nature of this disease, as in no other way will he or she be brought to dread infection and the transmission of infection.

To attempt to establish and confirm the identity of the gonococci in certain cases by means of a characteristic growth on artificial media serves no better than to confound the examiners, to jeopardize the safety of the patients and, too often, other individuals; and when negative findings are the result they serve simply as a loop-hole for some one to escape censure for responsibility for the transmission of the infection.

It is my belief from observation that later, or late in the course of an infection the Gram-negative diplococci tend to lie extracellularly (intercellularly) in order better to perpetuate themselves.

Until we can understand and control the propensity that gonorrhoeal infection displays for the perpetuation of its species, such as other chronic specific infections possess—quite similar to a characteristic of the perennials of flora—our task of eradication and elimination in the cases which we are called upon to treat will be no light undertaking. It would appear that the prostate gland is the seed bed from which this widespread infection, is the more easily, more frequently and more surely disseminated.

To contend that the intracellular Gram-negative diplococcus which confronts us so often in our work is not the same organism when it appears extracellularly would be to argue that nut-grass growing above the surface of the earth is not the same grass as its roots found below the surface of the earth.

After an examination of prostatic stripings or of endocervical smears at the conclusion of treatment of a case of gonorrhoeal infection or of the examination of a case with positive history of remote gonorrhoeal infection and treatment at that time—even though the bacteriological findings are nega-

tive—I believe we should inform the individual that there is NO FURTHER EVIDENCE of gonorrhoeal infection, since we are seldom justified in informing the patient that he or she is ABSOLUTELY FREE from GONORRHOEAL INFECTION.

After treatment, the burden of responsibility of adhering to a period of observation should then be placed upon the patient.

#### *Conclusion*

The Gram-negative diplococci in the extracellular role should be regarded just as typical and indicative of gonorrhoeal infection as the intracellular organisms; for, if the ability to retain the extracellular form over a longer period together with the propensity to perpetuate its own kind is considered, then the extracellular organisms are just as typical of gonorrhoeal infection as the intracellular—if not more so.

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### SPINAL ANESTHESIA\*

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W. J. ROLLINS, M.D.

*Macon*

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To produce analgesia by the introduction of drugs into the subarachnoid space has been of interest to physiologists and surgeons since Corning first introduced it in 1885. Babcock and Boyd in the early part of the century, and Pitkin more recently, have added impetus to our increasing knowledge of this form of anesthesia.

Many failures were experienced in the early use of spinal anesthesia due, no doubt, to the poor selection of cases for its use, the use of dangerous drugs, the oft-time failures in producing anesthesia, and the troublesome and often serious after-effects.

In the beginning it was used only in cases considered poor surgical risks; the elderly, the toxic and septic cases; in general those to whom the administration of inhalation anesthesia would be dangerous. Surgeons have come to realize lately that spinal anesthesia can be used on strong robust individuals and, in fact, is contraindicated in moribund cases.

This type of anesthesia finds its greatest usefulness in cases of respiratory diseases, including tuberculosis, nephritis, decompensated

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\*Read before the Sixth District Medical Society, Indian Springs, Georgia, June 26, 1929.

hearts, hypertension, arteriosclerosis, diabetes, marked obesity or emaciation, drug and alcoholic addiction; acute abdominal conditions as general peritonitis, strangulated hernia, all forms of intestinal obstruction and cases of shock with marked blood loss.

It must be remembered that a poor surgical risk remains a poor surgical risk with any form of anesthesia that may be used. But with the judicial and intelligent use of spinal anesthesia, it is the almost universal opinion that the large field of doubtful surgical risks can be markedly reduced.

This method of producing anesthesia is contraindicated in cases of marked hypotension, severe myocardial disease, moribund and extremely toxic cases. In diseases of the nervous system such as cerebro-spinal syphilis, brain and cord tumors, meningitis in all its forms, spinal anesthesia must not be used. Local disease of the spine is a contraindication to its induction. The method of choice in these cases is local or regional block.

Many drugs have been used. However, novocain is safest and most satisfactory. Stovain is a powerful anesthetic but it seems to produce many unpleasant after-effects, such as pain in the extremities and severe headache; it produces a paralysis of motor and vasomotor nerves as well as anesthesia of sensory nerves. Other drugs, as butyn, tropococain and apothetin have been abandoned as dangerous. Neocain in its action is very similar to novocain. The latter produces very little change in blood pressure, very little headache, usually no nausea or vomiting and gives a satisfactory and prolonged anesthesia.

Many failures in getting a "take" and most of the unpleasant after-effects can be avoided, provided the proper drug is used, and by scrupulous attention to the technique of administration. This is exceedingly important and should be undertaken only by one thoroughly familiar with the technique and one who has knowledge of the physiological and pharmacological actions to be expected. Not one of us would care to have an inhalation anesthesia given haphazardly by one who knew none of the danger signals. The same holds true to an even greater extent with spinal anesthesia. It is best given, I believe, by the

surgeon himself.

Pitkin, after very brilliant experimental work, has elaborated a technique and devised a drug combination which he rightly called "Controllable Spinal Anesthesia." It is his method and technique that I will give in detail. We adopted this method at the University of Virginia Hospital with a marked degree of success. We had previously used some of the other methods but since adopting this our results have been much better. There has been more uniform anesthesia, less post-operative discomfort and a much less average drop in blood pressure.

Novocain, the drug of choice, is prepared and combined in ampoules containing starch paste, alcohol, strychnine sulphate and saline solution. To this Pitkin gave the name Spino-cain. The alcohol in the mixture, is added to give the substance a specific gravity lighter than that of spinal fluid. Starch paste is added to make it more viscid than spinal fluid. This reduces its diffusibility in the spinal canal, so that the novocain is absorbed before it diffuses to a high level in the canal. Strychnine acts as a stimulant to the vasomotor constrictors thereby preventing, to some degree, the tendency to drop in blood pressure. This solution when injected into the spinal canal is viscid and is light. It confines itself to a small area of the canal, floating somewhat as the bubble in a spirit level. Thus the location of this solution can be controlled at any desired level in the spinal canal by tilting the table. It will be readily seen how necessary it is to keep the head low to prevent the rise of the solution to a dangerous level before absorption takes place.

By leaving out the alcohol and adding propantriol a solution heavier than spinal fluid is obtained. This solution gravitates to the most dependent portion of the spinal canal. Thus we have two solutions whose physiological action is the same but differing in specific gravity, one lighter, the other heavier than spinal fluid.

It can readily be seen that the technique of administration will vary according to the solution used. The lighter solution, spino-cain, is preferred for intra-abdominal work and can be safely used to produce analgesia as



high as the costal margin. The use of this solution precludes the necessity of keeping the head low or at least not higher than the horizontal, until the drug is completely absorbed which requires about twenty or thirty minutes. It must always be given with the patient in the Trendelenburg position.

The heavy solution can be given where work on the perineum or extremities is to be done and when it is desired to have the patient in an upright or semi-reclining posture. This form of anesthesia probably finds its greatest usefulness in obstetrics. Here anesthesia of the cervix, vagina and perineum may be secured without abolishing uterine contraction. This heavy solution must be given with the patient in Fowler's or the sitting position.

The patient should be prepared as usual for an abdominal operation. The colon and bladder should be emptied, to prevent soiling of the table and to render the patient more comfortable. For very nervous and apprehensive patients it is well to give  $\frac{1}{4}$  grain of morphine and 1/150 grain of hyoscine about one hour before the operation. This may be omitted with the more stoic individuals. The patient is then placed in a horizontal position, usually on the regular operating table, either on the right or left side; the left side for right sided operations, the right side for left side operations. For a midline incision either side will suffice. The back is arched to increase the spaces between the spinous processes, but the shoulders and hips must be kept in a vertical plane. The skin area is prepared in the usual manner with alcohol and iodine. A site is then selected for puncture somewhere between the last dorsal and the fifth lumbar vertebra.

The level of puncture does not necessarily determine the height of anesthesia. At the selected site an intradermal wheal is raised with a solution of 1% novocain in 3% ephedrine solution. The remainder of the 1 cc. ampoule of this solution is then injected along the proposed pathway of the spinal puncture needle. The ephedrine is used for the specific purpose of combating a fall in blood pressure. It will overcome the action of novocain on the vasoconstrictors and

will maintain the blood pressure without tendency to drop for two or three hours.

Through the anesthetized area the spinal puncture needle is introduced into the subarachnoid space. This needle should be of small calibre, about 22 gauge, should be of flexible steel with its point at an angle of 45 degrees, and dull at the heel. This type needle will make a very small opening in the dura which will close upon removing the needle, thus preventing a subsequent seepage of spinal fluid with a loss of the anesthetic and, also prevents the headache which follows withdrawal of too much fluid.

The patient must now be placed in the Trendelenburg position. The table can be manipulated to lower the head five or ten degrees. Five degrees tilt will permit anesthesia to the costal margin, ten to fifteen degrees will keep it below the umbilicus, while twenty to twenty-five degrees will confine the anesthesia to the perineum and extremities. Thus we see that the height of anesthesia depends more upon the tilt of the table than it does upon the site of puncture.

When the needle has entered the spinal canal the stylet is withdrawn and fluid is allowed to escape slowly. If the fluid is bloody it should be allowed to run until it becomes clear. If this does not occur the needle should be withdrawn and reinserted at a slightly different angle. The anesthetic agent should never be injected until the spinal fluid is perfectly clear, as this is the only assurance we have that the needle is actually in the canal. Allow approximately the same volume of fluid to escape as there is of the agent to be injected, usually not over two cc. This maintains the normal intraspinal pressure.

Now the syringe previously loaded with the spinocain is connected to the needle and the fluid is slowly injected into the spinal canal. The syringe is reloaded with a mixture of spinal fluid and the anesthetic agent, without detaching the needle, and this is immediately reinjected slowly. The withdrawal and reinjection expands the solution, mixes it with the spinal fluid, and increases the volume so as to completely bathe the cord at that point. The needle is withdrawn and the



puncture wound is covered with collodion.

Anesthesia begins to appear almost immediately. If it does not extend as high as desired, the head may be raised to five degrees or level for a few minutes after which it is lowered to ten or fifteen degrees Trendelenburg. After about ten minutes the patient's position can be changed and the operative field prepared. Usually as soon as this can be done the anesthesia is sufficient to begin the operation.

Throughout the operation pulse and blood pressure observation must be made and recorded. It is well to have an experienced person to watch the patient. An interesting conversation may be launched, the patient's attention detracted, and all worry and apprehension relieved.

Occasionally during an abdominal operation the patient will complain of slight nausea and a feeling of weakness. Small amounts of some favorite fluid usually give prompt relief. It may sometimes be necessary to suspend work for a few minutes until the nausea is over.

The post-operative care of these cases is similar to that given for general anesthetics. However, they are able to take liquid nourishment almost immediately upon return to bed. Occasionally there may be incontinence of the bladder or bowel but this disappears in one or two hours. There is a gratifying freedom from nausea, gas pains and other discomforts so often seen after general anesthesia.

The method described is for the use of spinocain, the light solution. When using the heavy solution the position of the patient in relation to the horizontal is reversed, that is, the head is kept high to prevent the upward extension of the fluid. This type is more useful in obstetrics and operations on the perineum.

DeCourcy says: "My results with Pitkin's method of spinal anesthesia have been excellent. This procedure has the advantage that the anesthesia is at all times under control. Its intensity and duration can be regulated; any desired level of anesthesia may be reached by slightly modifying the technique. As compared with other forms of spinal anesthe-

sia Pitkin's method produces much less nausea and fall in blood pressure."

#### *Summary*

Pitkin's method of controllable spinal anesthesia with spinocain gives a safe and effective anesthetic. It should be considered for all operations below the diaphragm.

Any desired level of anesthesia may be obtained by slightly altering the technique.

To obtain good results, strict attention to the technique of administration is necessary.

Ephedrine is the most effective drug to combat the occasional occurrence of fall in blood pressure.

By the proper use of the described technique all post-operative dangers may be avoided.

This form of anesthesia is undoubtedly gaining in favor among many surgeons in this country. The time may not be long before patients will demand this safe and more pleasant anesthesia.

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#### PELLAGRA\*

J. D. MIDDLEBROOKS, M.D.

#### *Powder Springs*

The real cause of pellagra has not been settled to the satisfaction of all the medical profession. Numerous theories have been proposed. In southern Europe where the disease has prevailed for more than a century, it was thought to be caused by eating spoiled corn. Sambon advanced the theory that the bite of certain insects caused the disease. Others have thought that the disease was caused by some specific microorgan-

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**THE JOURNAL**

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MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

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**CARDIAC ASTHMA**

Cardiac asthma may be defined as paroxysmal dyspnea, developing suddenly while the patient is at rest, accompanied by a sense of suffocation and occurring in organic heart disease. Sir James McKenzie described it as follows: "The patient goes to bed and may fall asleep for a few hours; he is then awakened by a sensation of suffocation, which forces him to sit up. He breathes heavily and struggles to get into a position which will allow him to breathe with freedom. This dyspnea may last for half an hour or longer, and may then gradually subside, so that the patient is able to go off to sleep again. Usually, however, the patient remains propped up in bed, and if he sleeps, his sleep is troubled and disturbed, with a fear of the recurrence of the distress. The attacks resemble ordinary asthma and may be quickly relieved by a hypodermic injection of morphia."

Cardiac asthma may be divided into four classes:

1.—Pure cardiac asthma, either mild or severe. The latter consists of agonizing attacks of suffocation, often associated with a sense of impending death. The mild attacks are often mistaken for bronchial asthma.

2.—Mixed anginous forms, or cardiac asthma with angina pectoris. In pure angina there is no embarrassment of breathing, and in pure cardiac asthma no pain.

3.—Mixed edematous form, or cardiac asthma with pulmonary edema.

4.—The combined form, or cardiac asthma with both angina and pulmonary edema.

Cardiac asthma occurs most often between the ages of sixty and seventy, though it does occur at an earlier age in syphilitic patients. It occurs more frequently in men than in women. The condition is found in people with degenerated heart muscle, high blood

pressure and changes in the arteries, particularly in the coronaries and with aortic regurgitation. At times it is seen in patients who have rheumatic heart disease. As our classification has suggested, angina pectoris and cardiac asthma are associated in many cases.

The exact cause of cardiac asthma is unknown. Why should the victim be seized with violent breathlessness while quietly sleeping, when he has been doing his regular work without discomfort? According to Wright, failure of the respiratory center may occur at night at which time the patient feels he can not expand his chest to breathe. This is generally followed by frequent shallow breathing, so-called paroxysmal dyspnea. Haldane suggests this is due to the depressed respiratory center being affected to an excessive degree by vagal impulses from the lungs which at first arrest breathing momentarily and then check the depth excessively. In cardiac dyspnea the main points to remember are (1) elevated metabolism; (2) diminished vital capacity; (3) anoxemia and consequently a malnourished respiratory center, and (4) accumulation of carbon dioxide at times with acidemia. Paul White more recently has suggested that the best and simplest explanation of the phenomenon is that the left ventricle is unable to pump forward the blood from the lungs with resultant pulmonary congestion.

Cardiac asthma is most often seen by the general practitioner. He is called in the middle of the night to see a patient who has probably been working the day previously, but who is suddenly awakened by a sense of suffocation which causes him to spring upright in bed and walk to an open window. The breathing is labored and he feels that he can not get air into his chest. Wheezing may occur and cough is frequent. This may be dry or a small amount of mucus, sometimes frothy, sometimes blood-tinged, may be raised. Cyanosis or ashy pallor may be present. The attacks usually last about an hour and then the patient is able to return to bed and sleeps fairly well with his head low. When seen by the doctor his blood

pressure, both systolic and diastolic may be definitely elevated. In his struggle for air he is sitting up and is exceedingly restless. Examination of the chest reveals that the heart-sounds are usually distant, gallop-rhythm is often present, and breathing may or may not be asthmatic in type. Prognosis is grave.

Cardiac asthma is most often confused with asthmatic bronchitis. It occurs rather late in heart disease, but it may be the symptom that causes the cardiac patient to seek medical aid. More and more attacks of asthma, or paroxysmal dyspnea, occurring at night in an elderly person should focus the attention of the physician on the cardiovascular system.

LILA M. BONNER, M.D.

### HEALTH EDUCATION WEEK

As reported in the December issue of the *Journal*, the first week in May has been designated "Health Education Week." One hundred cities and towns in the State have been chosen as centers for holding the public meetings on health education. The State Board of Health, the two medical colleges and the Georgia Tuberculosis Association are cooperating with the *Medical Association of Georgia* in putting on the greatest health education campaign ever conducted in Georgia. Replies have already been received from more than ninety per cent of the secretaries of the county societies which have been tentatively selected as centers for the lectures. This work will be done only under the supervision and with the full cooperation of the respective local societies. The subcommittee appointed by President Dancy is anxious to enlist at least two hundred members of the Association as volunteers to deliver these talks on health education to the public. This committee also invites each local society to send in a list of subjects most suitable for each locality.

### MEDICAL ASSOCIATION OF GEORGIA

Eighty-First Annual Session

AUGUSTA,

May 14, 15, 16.

### POST-GRADUATE SCHOOLS IN OBSTETRICS

The continuation of post-graduate schools in obstetrics, made possible by the Children's Bureau, of Washington City, and conducted by Prof. J. R. McCord, of Emory University, will be a source of great profit to the physicians of Georgia. In all there will be fifteen of these schools after resuming the program which was interrupted the first of July. A school will be held in Macon, beginning January 13, one in Thomasville beginning January 27, and one in Dublin on February 10. All of these schools are held for five days. Other schools are in process of arrangement for ten additional places. These will be held for five days each, beginning February 24, March 10 and 24, April 7 and 21, May 5 and 19, June 2 and 16, but the places at which these schools will be held have not yet been definitely selected by our State Board of Health.

The physicians throughout the state are cordially invited to attend any or all of these schools, and they are given without any charge whatever. Doctor McCord will be glad to see as many physicians present as can conveniently attend.

### PRESIDENT'S TOUR TO S. M. A. MEETING A SUCCESS

We got together on time in front of the DeSoto Hotel only to find that two of the visitors were on the upper floor of a garage with the elevator stuck. Eventually they got their cars down and we left Savannah almost an hour late. With full speed ahead we reached Brunswick three minutes late. The weather was ideal. Everybody was happy.

The drug firms and bottling works supplied the ladies with toilet articles and candy and the men with cigars and all of us with drinks.

At Brunswick we were met by a small delegation and escorted to the hotel. After a brief rest we passed on to Jacksonville, reaching there ten minutes ahead of time, waited a few moments at Trout River and then were met by a delegation from the Duval County



Medical Society which escorted us to the George Washington Hotel. At the hotel sixty to seventy physicians of Duval County Medical Society met us and entertained us to a delightful luncheon in the hotel dining room. Fried chicken and other good things were served. At the conclusion of the luncheon the Mayor gave us an address of welcome and I was called upon to respond. We then re-serviced the cars and left Jacksonville one hour late. A few cars joined us there. We took the Beach route and had a most pleasant drive on to Cocoa, which we reached at seven o'clock, one-half hour late. The party enjoyed supper together and after a good night's rest we left at 8:30 a. m. for Miami.

At Ft. Pierce a delegation of physicians met us. We delayed for a moment and then passed on. We visited Palm Beach and West Palm Beach, making a thorough inspection of the million dollar cottages of our wealthy friends. We reached Miami at 4:00 o'clock. No one met us at Miami, as I wired them in advance not to, as we wished to see Palm Beach and other places along the route, although Miami was prepared to meet us with a large delegation of ladies and men. The trip as a whole was very pleasant, the receptions and the souvenirs added much to the pleasure of the trip, the weather was ideal, the crowd in a good humor and no accidents marred the trip, one flat tire being the sum total of repairs.

#### THE ESSENTIALS NECESSARY TO CONSTITUTE A SUCCESSFUL MEDICAL ASSOCIATION AND BENEFITS DERIVED FROM IT\*

**M**edicos should belong to their county and state medical societies.

**E**nter your name for membership, if you are not an active member.

**D**edicate your life to a profession, excelled by none.

**I**magine a physician attempting to practice without the benefits of a society.

**C**ontent yourself with nothing less than the best of fraternal associates.

**A**ssociates of this type are usually found in medical societies.

**L**end all your influence to make this Association one of the best.

**A**ll societies are dependent upon the activities of its members.

**S**o take all interest possible in the advancement of your society.

**S**elf respect demands it.

**O**missions of small things, lead to tragedies of magnitude.

**C**onsult your officials concerning the needs of your society.

**I**ntimidate none of your associates when he is doing his best.

**A**dmiral is due members that are considerate of others.

**T**une in on medical programs, they will benefit you.

**I**nsist on minimum amount of static for any disturbance is annoying.

**O**blige fellow members when you can be of assistance to them.

**N**othing is more commendable than to come to the aid of fellow practitioners.

**O**ur medical Journal is instructive and helpful.

**F**igure the value of being protected against damage suits.

**Ga. Medical Ass'n** should be the most successful society in the South.

**Assist** in every way to make 1930 a banner year for the Medical Ass'n of Ga.

P. C. QUARTERMAN, M.D.

\*Read down.

# BOOK REVIEWS AND ABSTRACTS

## BOOK REVIEWS

*Modern Methods of Treatment* by Logan Clendenning, M.D., with chapters on special subjects by H. C. Anderson, M.D.; J. B. Cowherd, M.D.; H. P. Kuhn, M.D.; Carl O. Rickter, M.D.; F. C. Neff, M.D.; E. H. Skinner, M.D., and E. R. DeWeese, M.D.

Third Edition, 1929, by C. V. Mosby Co., St. Louis, 815 pages. Price, \$10.00.

This is a very commendable work, one that will find a useful place on the desk of the average practitioner and will be often reached for. It is divided into two parts, the first part describing the general procedures of the various methods used in treatment, and the second part describing the indications for the use of those methods according to the pathological physiology of the conditions treated.

The methods described include rest, drugs, biologic therapy, and prophylaxis, extracts of the ductless glands, dietetics, hydrotherapy, medical gymnastics, massage and exercise, electrotherapeutics, radiotherapy, climate, arotherapy, heliotherapy, psychotherapy, and various miscellaneous procedures.

The second part deals with the application of these methods to particular diseases and discusses this under these heads; treatment of infectious diseases, treatment of diseases due to allergy, diseases of metabolism, diseases of the respiratory system, diseases of the kidneys, diseases of the digestive system, of the ductless glands, of chronic intoxications, diseases of the organs of locomotion and the treatment of some common nervous disorders.

The discussions and directions are concise and explicit. The student is told what to do and what to avoid doing, what treatment will be valuable and what will be worthless. Of great interest is the short bit of medical history that is frequently given in discussing a method of treatment. The style is pleasant to read and yet the voice is one of authority. Not every new fad in treatment is described but only those of proven value. In all I have a most favorable impression of the book.

J. C. MASSEE, M.D.

*Applied Electrocardiography. An Introduction to Electrocardiography for Physicians and Students* by Aaron E. Parsonnet and Albert S. Hyman, with a foreword by Harlow Brooks. Pp. 206. Illustrations, 120. New York. The Macmillan Company, 1929. Price, \$4.00.

The frontispiece predisposes the reader in favor of this book. It is a fine schematic drawing of the human heart showing the conducting system and is called the "Phantom Heart." In the foreword Harlow Brooks calls attention to the fact that electrocardiography has come to stay and is a valuable asset to clinical medicine in its explanation of the pathology of the diseased heart. He mentions also that this book is written by

clinicians, rather than by physiologists or technicians and for this reason should be of great value to clinicians.

The introduction gives a short history of cardiology and electrocardiography and indicates that the text has been constructed for the understanding of the general practitioner as well as the specialist.

Chapter one deals with the physiological basis of electrocardiography with emphasis upon the normal electrocardiogram. Chapter two gives a description of each of the five most popular electrocardiograph instruments with its technique of operation. Many problems are discussed such as the location of the instrument, the position and preparation of the patient, the marking of records, etc. Chapter three takes up the diseases of the pacemaker or sinus node which is the all-important originator of that vital electrical impulse for the contraction of the heart muscle. Chapter four is on extrasystoles and chapter five the diseases of the auricles. The outstanding feature of this chapter is the advocacy that all patients with auricular fibrillation who are being digitalized should be followed by electrocardiography in order to avoid the many unpleasant sequelae of overdosage. The next five chapters are concerned with the diseases of the conducting system, and of the ventricles, disturbances of coronary artery circulation, electrocardiographic changes in acute infections and valvular heart disease in relation to electrocardiography.

Chapter eleven contains an original idea of the authors, entitled, "Detailed Analysis of Electrocardiographic Tracings." In this section each wave is discussed in tabulated form in relation to its absence, negativity, splitting, amplitude, etc., in normal and abnormal conditions. This method is very valuable for ready reference. The bibliography is well chosen and rather complete.

I should like to recommend this book as a fine text or reference book particularly suited to the needs of beginners in electrocardiography.

EVERT A. BANCKER, JR., M.D.

Atlanta.

*Anthropology and Modern Life* by Franz Boas, Professor of Anthropology, Columbia University. W. W. Norton and Co., Inc., New York, 1928. Price, \$3.00.

This series of essays written for the general reader should be of interest to the physician. Although many scientific facts are utilized, the book is rich in what may be called social psychology, of interest to those dealing with emotional problems. Problems of racial and national character are first dealt with. "The differences of cultural outlook and of bodily appearance have given rise to antagonisms that are rationalized as due to instinctive racial antipathies." The importance of environmental influences on body structures and

functions, as well as mental reactions is discussed, which must be clearly differentiated from hereditary influences if possible. "For large racial groups, acceptable proof of marked mental differences due to organic, not social causes have never been given." "It does not matter from what point of view we consider culture, its forms are not dependent upon race." "Neither the bonds of blood nor those of language alone make a nation; it is rather the community of emotional life that rises from our every-day habits, from our forms of thoughts, feelings and actions, which constitute the medium in which every individual can unfold freely his activities." Then follows a chapter on eugenics which is very interesting; the difficulty of selecting standards is pointed out, also the impossibility of eugenics alone altering fundamental environmental influences; eugenics should concern itself with suppression of propagation of defectives whose deficiencies cannot be improved. In discussing the stability of culture, he points out that like adult behavior, it depends largely on habit formations. Further chapters deal with education and modern civilization. "It is necessary that crises and struggles that are characteristic of individual life in our society be investigated in societies in which our restraints do not exist, while others may be present, before we assume all too readily that these are inherent in human nature." Those interested in social problems will find this book of great interest.

WILLIAM A. SMITH, M.D.

*Diseases of the Nervous System—A Text-book of Neurology and Psychiatry* by Smith Ely Jelliffe, M.D., Ph.D., and William A. White, M.D. Fifth Edition. Revised, Rewritten and Enlarged. 1174 pages, 476 engravings and 13 plates. Lea and Febiger, Philadelphia, 1929. \$9.50.

A new edition of this outstanding American text-book of neurology and psychiatry, is timely. The book is written along the same plan as former editions, stressing the three levels of the nervous system, vegetative, sensori-motor and psychic. These form the major divisions of the book. This is the only text-book that emphasizes this broad view-point and the consideration of the individual as a unit, with interactions between these levels. To quote from the preface, "Man is not only a metabolic apparatus, accurately adjusted to a marvelous efficiency through the intricacies of the vegetative neurological mechanisms, nor do his sensori-motor functions make him solely a feeling, moving animal, seeking pleasure and avoiding pain. . . . nor yet is he exclusively a psychic machine. . . . He is all three and a neurology of today that fails to interpret nervous disturbances in terms of all three of these levels takes too narrow a view of the function of that master spirit in evolution, the nervous system. The hormone is the type of tool at the physico-chemical level, the reflex at the sensorimotor level and finally the symbol at the psychic level."

The anatomic plates and illustrations are excellent and worthy of study. To consider so large a field in one volume is a difficult task, and some sections are

necessarily brief, but numerous references are given. Some omissions are sympathectomy in vascular disorders, Schilder's disease (encephalitis periaxialis diffusa) virus encephalitis (post-vaccinal, etc.), the use of trypersemide in neurosyphilis, the Queckenstedt test in diagnosis of cord compression and sinus thrombosis, the value of x-ray in the treatment of pituitary neoplasms, the ketogenic diet in the treatment of epilepsy, spontaneous subarachnoid hemorrhage. However, the book is so full of broad principles and stimulating problems that it undoubtedly ranks as the best American text.

WILLIAM A. SMITH, M.D.

## COUNTIES REPORTING FOR 1930

### BARROW COUNTY MEDICAL SOCIETY

Barrow County Medical Society announces the following officers for 1930:

President—C. B. Almand, Winder.

Vice-President—R. C. Cross, Winder.

Secretary-Treasurer—W. L. Mathews, Winder.

Delegate—E. R. Harris, Winder.

Alternate—R. P. Adams, Bethlehem.

### BEN HILL COUNTY MEDICAL SOCIETY

Ben Hill County Medical Society announces the following officers for 1930:

President—G. W. Willis, Ocilla.

Vice-President—Aubrey Harper, Wray.

Secretary-Treasurer—L. S. Osborne, Fitzgerald.

Delegate—R. M. Ware, Fitzgerald.

Alternate—Frank Ward, Fitzgerald.

Censors—D. B. Ware, W. P. Coffee and Ralph Russell.

### BARTOW COUNTY MEDICAL SOCIETY

Bartow County Medical Society announces the following officers for 1930:

President—A. L. Horton, Taylorsville.

Vice-President—S. M. Howell, Cartersville.

Secretary-Treasurer—H. C. Pearson, Cartersville.

Delegate—T. Lowry, Cartersville.

Alternate—H. C. Pearson, Cartersville.

### DOUGHERTY COUNTY MEDICAL SOCIETY

Dougherty County Medical Society announces the following officers for 1930:

President—N. R. Thomas, Albany.

Vice-President—N. E. Benson, Albany.

Secretary-Treasurer—I. M. Lucas, Albany.

Delegate—J. P. Tye, Albany.

Alternate—A. S. Bacon, Albany.

### HALL COUNTY MEDICAL SOCIETY

Hall County Medical Society announces the following officers for 1930:

President—H. K. Phillips, Helen.

Vice-President—W. W. Liles, Gainesville.

Secretary-Treasurer—Pratt Check, Gainesville.

Delegate—C. D. Wheelchel, Gainesville.

Alternate—R. L. Rogers, Gainesville.

Censors—L. R. Bryson, W. A. Palmour and J. L. Meeks.



## HENRY COUNTY MEDICAL SOCIETY

Henry County Medical Society announces the following officers for 1930:

President—J. G. Smith, McDonough.  
 Vice-President—E. G. Colvin, Locust Grove.  
 Secretary-Treasurer—H. C. Ellis, McDonough.  
 Delegate—R. L. Tye, McDonough.

## RANDOLPH COUNTY MEDICAL SOCIETY

Randolph County Medical Society announces the following officers for 1930:

President—F. M. Martin, Shellman.  
 Vice-President—T. F. Harper, Coleman.  
 Secretary-Treasurer—G. Y. Moore, Cuthbert.  
 Delegate—E. C. McCurdy, Shellman.  
 Alternate—F. S. Rogers, Coleman.  
 Censors—W. W. Crook, F. S. Rogers and E. C. McCurdy.

## STEWART-WEBSTER COUNTIES MEDICAL SOCIETY

Stewart-Webster Counties Medical Society announces the following officers for 1930:

President—W. F. McCurdy, Weston.  
 Vice-President—C. S. Lynch, Lumpkin.  
 Secretary-Treasurer—J. M. Kenyon, Richland.  
 Delegate—C. E. Pickett, Richland.

## TRI-COUNTY MEDICAL SOCIETY

Tri-County Medical Society announces the following officers for 1930:

President—C. K. Sharp, Arlington.  
 Vice-President—C. W. Twitty, Elmodel.  
 Secretary-Treasurer—W. O. Shepard, Bluffton.  
 Delegate—C. R. Barksdale, Blakely.  
 Alternate—J. G. Standifer, Blakely.

## WALKER COUNTY MEDICAL SOCIETY

Walker County Medical Society announces the following officers for 1930:

President—H. F. Shields, Chickamauga.  
 Vice-President—D. W. Hammond, LaFayette.  
 Secretary-Treasurer—J. H. Hammond, LaFayette.  
 Delegate—M. W. Spearman, Chickamauga.

## WARE COUNTY MEDICAL SOCIETY

Ware County Medical Society announces the following officers for 1930:

President—H. G. Huey, Homerville.  
 Vice-President—B. R. Bussell, Waycross.  
 Secretary-Treasurer—W. L. Pomeroy, Waycross.  
 Delegate—D. M. Bradley, Waycross.

## NEW MEMBERS FOR 1929

Cato, F. L., DeSoto.  
 Little, R. N., Lyerly.  
 Logan, Jos, Plains, R. F. D.  
 McMath, J. F., Americus.  
 Smith, Wm. J., DeSoto.

## NEW MEMBERS FOR 1930

Garner, W. R., Gainesville.

## PELLAGRA

(Continued from page 31)

ism. Most recent and most popular is the theory of Goldberger in which he claimed that an inadequacy of certain vitamins was the true cause of pellagra. In support of his theory we may note the great efficacy of food containing the essential vitamins in developing the resistance of an individual in many other diseases, especially tuberculosis, scurvy, and rickets. However, the etiology of the disease is still a question to many, and personally I should not be surprised if sometime some one should discover the cause to be a specific microorganism. When we consider the great length of time required by investigators to discover the true cause of tuberculosis, typhoid fever, malaria, syphilis, leprosy, and many other infectious diseases, we can not hope for immediate results in discovering the cause of this disease.

Diagnosis is simple in a typical case of pellagra, but occasionally it is difficult. Let me emphasize the importance of a correct diagnosis as early as possible, for the disease is more amenable to treatment in the beginning stage. It is unnecessary to dwell on prognosis. It is sufficient to say that, when the disease reaches the stage of pronounced cachexia, the prognosis is very unfavorable.

In the treatment of this disease I advise a diet of wholesome food, such as milk, buttermilk, fresh butter and eggs, dried beans, peas, fresh fruits, vegetables and whole wheat bread. The patient's condition should be considered in arranging.

I inform the patient that proper food is more important than medicine. Of course the stress laid on the importance of the proper diet in this disease is a partial recognition of the Goldberger theory. Gastro-intestinal irritation, if present, should be relieved with dilute hydrochloric acid, essence of pepsin, and bismuth subnitrate, so that the patient may eat and digest his food. If it is inconvenient for the patient to come to my office every other day to receive sodium cacodylate, I give the following prescription:

R

Fowler's solution	gtts. iii
Sodium salicylate	gr. iii

Bismuth subnitrate                      gr. x  
 Elix. lacto-pepsin                      zi  
 M. et Sig.: t. i. d., one dose.

The above prescription should not be used along with the hydrochloric acid. If the gastro-intestinal irritation is very severe, I add:

Bismuth Subnitrate                      Z Iv.  
 Sodium salicylate                      Z I  
 Mucilage Acacia fl.                      Oz Iv—M.

Sig.

Teaspoonful every 3 hours.

It is my belief that no opiates should be used in the control of the diarrhea unless it is extremely severe. If the patient is constipated, mild laxatives should be employed, but purgatives are harmful. Mouth hygiene is very important, mild antiseptics and astringents are advisable.

You will notice that I use bismuth continuously and freely in the treatment of this disease. I believe that there is a possibility that it exercises a specific influence in pellagra. Most physicians prescribe arsenic in some form, but I have greater faith in bismuth. Is it not possible that these therapeutic tests indicate a parasitic origin of pellagra?

#### COMMUNICATIONS

DEPARTMENT OF COMMERCE, AERONAUTICS BRANCH, WASHINGTON

To the Editor:

The attached resolutions were passed by the American Medical Association at its stated assembly held at Portland, Oregon, in July, 1929. It is believed that these resolutions are of sufficient interest in view of the rapidly increasing number of physicians designated as Medical Examiners to warrant publication in your journal.

You may be interested to know that all applicants for federal pilot licenses, either for flying or for training as pilots, must pass physical examinations before physicians designated by the Secretary of Commerce. They must likewise be re-examined periodically. These examinations cover a rather detailed examination of the eyes, a brief examination of the ear, nose and throat, equilibrium, a general physical examination, and a detailed examination of the nervous system. There are now about 750 Medical Examiners so designated throughout the country. All these examinations are reviewed in Washington where the applicant is finally certified as qualified or disqualified for the grade for which he has applied.

L. H. BAUER, M.D., *Medical Director.*  
 Washington, D. C., December 21, 1929.

#### EXAMINATIONS AERONAUTICS BRANCH— DEPARTMENT OF COMMERCE

Whereas, The Aeronautics Branch, Department of physical examinations of civil pilots and prospective pilots, in the interest of safety; and,

Whereas, The physical standards adopted are in keeping with those adopted universally, and have reduced aircraft accidents from physical causes to a minimum; and,

Whereas, The department has required these examinations to be made only by designated physicians in the interest of uniformity and control and in accordance with the custom adopted for the Army and Navy and in other countries; and,

Whereas, The selection of examining physicians by the department has been based on training as flight surgeons or its equivalent, or on group examinations by specialists, a high standard of examination has resulted; and,

Whereas, The department requires that all examiners hold the degree of Doctor of Medicine, be licensed to practice medicine under the laws of their respective states, and further requires that the appointees be recognized as ethical practitioners in their respective localities, thereby supporting the high standards advocated by this Association, be it

Resolved, That the American Medical Association at its stated assembly in 1929 endorses the medical work of the Department of Commerce, its methods of physical examination and its method of selection of medical examiners, and urges that the same high standards be continued and offers the support of the American Medical Association in furthering the specialty of aviation medicine; and be it further

Resolved, That a copy of this resolution be sent to the President of the United States, the Secretary of Commerce, and the Secretary of each state medical society.

#### COUNCIL ACCEPTED

To the Editor:

In addition to the articles enumerated in our letter of October 25, the following have been accepted:

*Curdolac Food Co.*—Curdolac Soya Flour, Curdolac Casein-Bran Improved Flour, Curdolac Soya-Bran Flour, Curdolac Breakfast Cereal, Curdolac Casein Compound, Curdolac Wheat-Soya Flour, Curdolac Soya-Cereal Johnny Cake Flour, Curdolac Soya-Bran Breakfast Food.

*Cutter Laboratory*—Ampoule Solution Silver Nitrate, 1 per cent Typhoid Paratyphoid Prophylactic hospital size package Polyanerobic Antitoxin.

*De Pree Chemical Co.*—Sulpharsphenamine-De Pree, 0.5 Gm. Ampules, Sulpharsphenamine-De Pree, 0.9 Gm. Ampules.

*H. K. Mulford Co.*—Gelatin Compound Phenolized-Mulford Diphtheria Toxoid-Mulford, 30 cc. vial, Erysipelas Streptococcus Antitoxin, Concentrated, 10 cc. syringe, Typho-Bacterin Mixed (Triple Vaccine TAB), thiry 1 cc. vial package, Typho-Serobacterin-Mulford (Sensitized Typhoid Vaccine), 3 syringe package, Normal Horse Serum without Preservative.

Alder Pollen Extract-Mulford; Alfalfa Pollen Extract-Mulford; Annual Sage Pollen Extract-Mulford; Apple Pollen Extract-Mulford; Aster Pollen Extract-Mulford; Blue Beech Pollen Extract-Mulford; Boneset Pollen Extract-Mulford; Brown Grass Pollen Extract-Mulford; Burning Bush Pollen Extract-Mulford; Burweed Marsh Elder Pollen Extract-Mulford; Buttercup Pollen Extract-Mulford; California Mugwort Pollen Extract-Mulford; Careless Weed Pollen Extract-Mulford; Cedar Tree Pollen Extract-Mulford; Clover Pollen Extract-Mulford; Crab Grass Pollen Extract-Mulford! Dahlia Pollen Extract-Mulford; Dragon Sage Pollen Extract-Mulford; Elm Tree Pollen Extract-Mulford; English Plantain Pollen Extract-Mulford; Fescue Pollen Extract-Mulford; Golden Glow Pollen Extract-Mulford; Hickory Tree Pollen Extract-Mulford; Milo Maize Pollen Extract-Mulford; Mock Orange Pollen Extract-Mulford; Oat Pollen Extract-Mulford; Olive Pollen Extract-Mulford; Pecan Tree Pollen Extract-Mulford; Pine Tree Pollen Extract-Mulford; Poverty Weed Pollen Extract-Mulford; Prairie Grass Pollen Extract-Mulford; Privet Pollen Extract-Mulford; Quack Grass Pollen Extract-Mulford; Rabbit Brush Pollen Extract-Mulford; Rose Pollen Extract-Mulford; Salt Bush Pollen Extract-Mulford; Shad Scale Pollen Extract-Mulford; Sheep Sorrel Pollen Extract-Mulford; Slender Ragweed Pollen Extract-Mulford; Spring Amaranth Pollen Extract-Mulford; Sudan Grass Pollen Extract-Mulford; Velvet Grass Pollen Extract-Mulford Western Giant Ragweed Pollen Extract-Mulford; Wheat Pollen Extract-Mulford; Wild Oats Pollen Extract-Mulford; Willow Tree Pollen Extract-Mulford; Winter Grass Pollen Extract-Mulford; Yellow Foxtail Grass Pollen Extract-Mulford.

National Drug Co.—Diphtheria Toxoid.

Thompson's Malted Milk Co., Inc.—Thompson's Maltose and Dextrin.

COUNCIL ON PHARMACY AND CHEMISTRY  
OF THE AMERICAN MEDICAL ASSOCIATION.  
Chicago, Ill., November 29, 1929.

#### APPROVED PRODUCTS

To the Editor:

In addition to the articles enumerated in our letter of August 30, the following have been accepted:

Abbott Laboratories

Metaphen 2500

Hollister-Stier Laboratories

Bacillus Acidophilus Culture—Hollister-Stier

Acne Vaccine

Pertussis Bacillus Vaccine

Typhoid—Paratyphoid Prophylactic

Staphylococcic Vaccine

Mead Johnson & Co.

Sobee

Sandoz Chemical Works, Inc.

Calcium Gluconate—Sandoz

E. R. Squibb & Sons

Diphtheria Toxin—Squibb, 30 cc. vial.

Yours truly,

COUNCIL ON PHARMACY AND CHEMISTRY.

American Medical Association.

Chicago, September 28, 1929.

TO THE EDITOR:

In addition to the articles enumerated in our letter of November 29th, the following have been accepted:  
E. Bilhuber, Inc.

Lenigallol-Zinc Ointment

Cutter Laboratory

Scarlet Fever Streptococcus Antitoxin-Cutter

Mead Johnson & Co.

Mead's Viosterol in Oil 100 D

H. K. Mulford Co.

Ampules Sodium Cacodylate-Mulford,  $\frac{3}{4}$  grain, 1 cc.

Ampules Sodium Cacodylate-Mulford, 3 grains, 1 cc.

Ampules Sodium Cacodylate-Mulford, 5 grains, 1 cc.

Winthrop Chemical Co., Inc.

Tablets Tutocain No. 6

The following article has been exempted and included with the List of Exempted Nonmedicinal Articles (New and Non-official Remedies, 1929, p. 485):

Child Welfare Guild, Inc.

Bite-X

COUNCIL ON PHARMACY AND CHEMISTRY,  
AMERICAN MEDICAL ASSOCIATION.  
Chicago, Ill., Dec. 28.

#### IMPOSTOR

TO THE EDITOR:

On or about the 10th of December a young man claiming to be a Dr. Charles Carswell, Jr., was in Waycross. While in this city he visited my office, claiming to be a distant relative of mine, and a son of one Dr. Charles Carswell, Sr., who he said was Dean of the University of Cincinnati, College of Medicine. After leaving my home he went back to his hotel, and there cashed a check for \$25.00. This check was purported to be signed by a Dr. Cason of Jacksonville, and was made out to this pseudo, Dr. Carswell. This check was returned by the Jacksonville Bank with a statement that they carried no such account, and that their directory did not show a Dr. Cason in Jacksonville.

Mr. C. R. Hall, manager of the Phoenix Hotel of Waycross, wrote the University of Cincinnati asking about Dr. Carswell, Sr. We enclose herewith a copy of the reply from the Dean of the University of Cincinnati, College of Medicine, which clearly states that they know of no Dr. Carswell, Sr. I also enclose a letter from the Dean to myself, which explains itself. I wish to state that I have never seen the young man before, and know nothing whatever about him, but I do believe that he is a crook from start to finish. He cashed the check, mentioned above, by stating that he was my first cousin. I am writing to you that you may mention this in the next issue



of the *Journal* so that no other physicians in Georgia may be imposed upon.

This is a brief description of him: Age, 24 to 26; height, about 6 feet; weight, about 170 pounds; coal black hair, dark eyes, heavy black eyebrows, and handsome. He is a glib talker, claims to be a graduate of medicine, and clearly well educated. He has a good personality, and mixes well. He travels in an old model Ford coupe with a Virginia tag. Under the sides of the fenders is an orange color with orange wheels.

We hope that something can be done to stop this rascal before he gets any further.

H. J. CARSWELL, M.D.

Waycross, Ga., Dec. 28, 1929.

H. J. Carswell, M.D.,

Waycross, Georgia.

My Dear Dr. Carswell:—

I am in receipt of your communication of December 16th and in reply am sending you attached a copy of a communication which I recently addressed to Mr. Hall, of your city.

As I informed Mr. Hall, we know of no one by the name of Dr. Charles Carswell, Sr., and the young man who called upon you must be a rank impostor.

I sincerely regret the incident, but there is nothing that I can do to help you.

A. C. BACHMEYER, M.D., Dean,

University of Cincinnati College of Medicine.  
Cincinnati, Ohio, Dec. 19, 1929.

Mr. C. R. Hall, Manager,

Phoenix Hotel,

Waycross, Georgia.

My Dear Mr. Hall:—

Your letter of December 13th has been delivered to me as Dean of the College of Medicine, University of Cincinnati.

I feel sure that you have been imposed upon, for we do not know any Dr. Charles Carswell, Sr. No such individual is connected with the department of medicine or any of the other departments, so far as I have knowledge, of the University of Cincinnati.

It would not surprise me greatly if it developed that the man you befriended was not the same individual who during the past summer did likewise with one of our professors. On that occasion this individual passed himself off as a son of one of the professors' classmates. He spoke rather glibly of his father's associations and succeeded in extracting \$25.00 from this professor. It later developed that the man whose son he claimed to be was not even married.

I sincerely regret that we can be of no assistance to you.

A. C. BACHMEYER, M.D., Dean,

University of Cincinnati College of Medicine.  
Cincinnati, Ohio, Dec. 17, 1929.

## NEWS ITEMS

The Thomas County Medical Society met at Thomasville on December 17th. Dr. Benjamin Bashinski, Macon, read a paper on Pediatrics. Officers were elected for 1930.

Dr. and Mrs. Howard C. Derrick, Oglethorpe, entertained the members of the Macon County Medical Society at their home on December 17th.

The Clarke County Medical Society met at the Hotel Georgian on December 12th. Officers for the ensuing year were elected. The scientific program consisted of a "Symposium on Fractures."

The Georgia Medical Society, Savannah, held its annual meeting on December 10th. Officers and delegates were elected for 1930.

Dr. Gordon T. Crozier, Valdosta, entertained the members of the Lowndes County Medical Society at the Twin Lakes Tavern on December 13th. Officers were elected. Dr. Thos. H. Smith, Valdosta, will be host at the January meeting.

Dr. and Mrs. O. N. Harden, Cornelia, entertained the members of the Habersham County Medical Society and Woman's Auxiliary at their home on December 6th.

The Walker County Medical Society met at Lafayette on December 11th. Officers were elected.

Dr. Jas. R. McCord, Atlanta, gave an intensive course in the "Principles and Practice of Obstetrics" at Macon, January 13th to 17th, inclusive. Short courses in post-graduate work are sponsored by the State Board of Health in cooperation with the Children's Bureau of the Department of Labor, Washington, D. C.

The members of the Barrow County Medical Society have formed the "Barrow County Physicians Protective Association." The purpose of the organization is to protect its members against people who are financially able to pay for medical service and unwilling to do so. Each member of the Association, which includes all the doctors in Barrow county, furnishes the names regularly to other members of people owing accounts and making no effort to pay. The association is anxious for all to have necessary medical attention and directs the paupers of the county to apply to the ordinary for medical service. "It is not the desire of the Association to deny one the benefit of medical service, neither is it the desire to render such service without compensation, except to worthy charity."

The physicians of Burke County announce the organization of an Association similar to that organized by the doctors of Barrow County.

The American Public Health Association will hold its fifty-ninth annual meeting in Fort Worth, Texas, during the week of October 27, 1930. Additional information may be obtained from Mr. H. N. Calver,

Executive Secretary, 370 Seventh Avenue, New York City.

The Sumter County Medical Society met at the Windsor Hotel, Americus, on December 12th. Dr. Wm. H. Houston, Commissioner of Health, read a paper on "Malaria in Sumter County," Dr. J. W. Chambliss, Chairman of the Sumter County Board of Health, gave a statement of the work and expenditures of the board of health, entitled "Some Facts from the Public Health Office for 1929." Officers were elected for the ensuing year.

Dr. Robert C. McGahee, Warrenton, has spent several weeks at the St. Louis Children's Hospital, St. Louis, Missouri, taking a post-graduate course in pediatrics.

The Southern Surgical Association held its forty-second annual session in Atlanta, December 10 to 14. The following officers were elected: President, Dr. James M. Mason, Birmingham, Alabama; First Vice-President, Dr. Urban Maes, New Orleans, Louisiana; Second Vice-President, Alexius W. McGannan, Baltimore, Maryland; Secretary, Dr. Robert L. Payne, Norfolk, Virginia; Treasurer, Dr. Julius H. Taylor, Columbia, South Carolina. The next session will be held in Lexington, Kentucky, in 1930.

Dr. J. R. Dykes, formerly of Cairo, announces the removal of his office to Swainsboro.

Dr. O. D. Hall announces the opening of Dr. Hall's Radium Clinic and the removal of his office to 106 Linden Avenue, N. E., Atlanta. The clinic is devoted to the diagnosis and treatment of all conditions in which the use of radium is indicated.

The First International Congress on Mental Hygiene will be held in Washington, D. C., May 5th to 10th, 1930. Practically all aspects of mental hygiene will be covered at the Congress. Details of the program have been worked out by a committee of which Dr. Frankwood E. Williams, Medical Director of the National Committee for Mental Hygiene, is chairman, collaborating with correspondents in many countries. Topics are now ready for publication, and are contained in a 33 page preliminary announcement. Copies may be obtained by writing to Dr. John R. Shillady, Administrative Secretary, 370 Seventh Avenue, New York City.

Dr. W. H. Stoner, who was formerly Director of the Medical Division Professional Service Department of E. R. Squibb & Sons, has joined the Scientific Department of Hoffman-La Roche, Inc., of Nutley, N. J., where he assumes the duties of Medical Director. Dr. Stoner brings to Roche a wealth of experience in the medico-scientific world. His works in the field of Bio-Chemistry and Laboratory Methods, basal Metabolism and Diabetes have been extensively reported and for a time (1921-1926) he was Associate Professor of Bio-Chemistry and Diseases of Metabolism at the Graduate School of Medicine, University of Penn-

sylvania. In securing the services of Dr. Stoner, Roche has revealed once again its seriousness of purpose in the realm of scientific medicine and its solemn sense of duty to the medical profession. The Roche Scientific Department is comprised of men well known in scientific circles everywhere and its staff is capable of dealing intelligently with not only clinical problems but also the chemical, bio-chemical and pharmacological questions related to medicine. Physicians are invited to correspond with the Department whenever special information, whether or not it pertains to a Roche product, is desired. Dr. Stoner was graduated from Ursinus College in 1908 with an A.B. degree and obtained his A.M. two years later. In 1910 he also received a Ph.C. from the Medico-Chirurgical College at Philadelphia with the additional degrees of Phar.D. conferred upon him in 1913 and M.D. in 1915. After internship for two years in the Philadelphia General Hospital he was commissioned a Captain in the Medical Corps of the U. S. Army and was attached to British, Belgian, French and Portuguese combatant units on the Flanders front during 1917 and 1918.

The Randolph County Medical Society met at Cuthbert on January 2nd. Dr. W. G. Elliott, Cuthbert, read a paper on Typhoid; Dr. W. W. Binion, Benevolence, gave a Case Report.

The Turner County Medical Society met at Ashburn on December 16th. Officers were elected for the ensuing year. The members have planned to hold regular monthly meetings during the year.

Dr. James N. Brawner, Atlanta, was the principal speaker on the program and installed as President of the Fulton County Medical Society at its twenty-fifth anniversary held at the Capitol City Club on the evening of January 2nd. Dr. Allen H. Bunce presided as toastmaster and introduced the officers of the society for 1930. Other officers installed were: Dr. Avary M. Dimmock, Vice-President; Dr. Howard Hailey, Secretary-Treasurer. Another feature of the program was the presentation of the Luther C. Fischer award to Dr. L. Minor Blackford for the best scientific paper read before the society during the year 1929.

Dr. M. M. Burns, Atlanta, was elected chairman of the Board of Education for the city of Atlanta at its meeting held on January 2nd.

Doctors I. J. Parkerson, B. W. Yawn and J. Cox Wall announce the opening of their hospital, "The Clinic," medicine, surgery, x-ray and diagnostic laboratory, corner Fourth Avenue and King Street, Eastman.

Dr. James J. Clark announces the association of James F. Pitman in the practice of roentgenology, Suite 14, Doctors Building, 478 Peachtree Street, N. E., Atlanta.

Dr. J. C. Orr, Buford, was elected President of the Gwinnett County Medical Society at its meeting held on December 17th; Dr. A. D. Williams, Law-

renceville, Vice-President; Dr. D. C. Kelley, Lawrenceville, the efficient Secretary-Treasurer for many years, was re-elected. The officers expect to increase the roster of members and maintain an excellent organization in the future.

Dr. F. G. Colvin, formerly of Ray City, removed to Ocilla.

Dr. Robert C. Crichton announces the opening of his office at Suite 50-52, 105 Forrest Avenue, N. E., Atlanta.

Dr. Hugh N. Page, Augusta, announces the removal of his office to 512 Southern Finance Building.

### MARRIAGES

Dr. Stewart R. Roberts, Atlanta, and Miss Ruby Holbrook, New York City, December 16, 1929.

### OBITUARY

Dr. Thomas D. Love, Atlanta; Atlanta School of Medicine, Atlanta, 1883; aged 68; died at his home, 360 Tenth Street, on December 5, 1929. He was born in Cave Springs, Georgia, and had resided in Atlanta practically all his life. Dr. Love was the son of Dr. W. A. Love, the first dean of the Atlanta School of Medicine. He was a member of the Trinity Methodist Church. Surviving him are his widow, one son, H. N. Love, Atlanta; one daughter, Mrs. Walter E. Young, Oakland, California. Funeral services were conducted from Spring Hill church by Rev. M. M. Walraven and interment in Greenwood cemetery.

Dr. La Dessie H. Lanier, Oliver; University of Georgia Medical Department, Augusta, 1888; aged 66; died at his home on November 29, 1929. He had suffered a long illness. Three sisters survive him.

Dr. Chalmers Hinton, Lawrenceville; Member; University of Georgia Medical Department, Augusta, aged 41; died on December 19, 1929, of injuries sustained in an automobile accident. Dr. Hinton had resided in Lawrenceville for about fifteen years, had an extensive practice and was widely known. Dr. Hinton was a member of a distinguished family. He had taken several post-graduate courses at Johns Hopkins University School of Medicine, Baltimore, and in New York, after graduating in medicine. Dr. Hinton was a member of the Dacula lodge of Masons, and the Methodist church. He was prominent in civic and church work. Surviving him are his widow, mother, two brothers, Claude Hinton, Dacula; and Dr. Herbert Hinton, New Jersey; five sisters, Miss Una Hinton, Decatur; Miss Anna Lee Hinton, Dacula; Mrs. B. V. Wilson, Decatur; Mrs. Edgar Campbell, Americus, and Mrs. John Perkle, Monroe. Funeral services were conducted from the residence and interment in Pleasant Hill cemetery.

### BOOKS RECEIVED

*Clinical Obstetrics.* By Paul T. Harper, M.D., Fellow of the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons, and of the New York Obstetrical Society. Clinical Professor of Obstetrics, Albany Medical College. Regional Consultant in Obstetrics, New York State Department of Health. Illustrated with 84 plates of engravings (250 figures) with legends and charts, and contains 629 pages. Publisher: F. A. Davis Company, 1914 Cherry Street, Philadelphia, Pennsylvania. Price \$8.00.

*Hemorrhoids—The Injection Treatment and Pruritus Ani.* By Lawrence Goldbacher, M.D., Philadelphia. Illustrated with 31 half tone and line engravings, some in colors. Contains 205 pages. Publishers: F. A. Davis Company, 1914 Cherry Street, Philadelphia, Pennsylvania. Price \$3.50.

### THE TRUE STORY OF ACTEROL

(For additional details see the Mead Johnson announcement in this issue and also watch for special color supplement, Journal American Medical Association, January 18. All Mead Products are Council-Accepted.)

Chemists call it by its correct chemical name, *solution activated ergosterol*—the name by which Mead Johnson & Company first supplied it.<sup>1</sup> The largest manufacturer of rare sterols in America, early having activated cholesterol<sup>2</sup> (1925), being first to commercially produce pure ergosterol<sup>3</sup> and to standardize activated ergosterol<sup>4</sup> (October, 1927), seeking to protect themselves and the medical profession against substitution, Mead Johnson & Company coined the name *Acterol*—signifying *activated ergosterol*. The Council on Pharmacy subsequently coined a name, *Viosterol*. As servants of the American Medical Profession, this Company cheerfully defers to its wishes and now calls its product Mead's Viosterol in Oil, 100 D. The product remains the same; only the name is changed.

### References

- 1 J. Biol. Chem., 76:2.
- 2 Ibid., 66:451.
- 3 Ibid., 80:15.
- 4 Ibid., 76:251.

### 1930 HONOR ROLL \*

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 5, 1929.
2. Barrow County, Dr. W. L. Mathews, Winder, December 5, 1929.
3. Dougherty County, Dr. I. M. Lucas, Albany, December 28, 1929.
4. Lamar County, Dr. J. M. Rogers, Barnesville, January 6, 1930.

\*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.



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## EPILEPTIFORM SEIZURES AS AN EARLY SYMPTOM OF BRAIN TUMOR\*

*With Special Reference to Cases Which Have  
Been Erroneously Diagnosed as  
Idiopathic Epilepsy*

LEWIS M. GAINES, M. D.  
Atlanta

It is well known that epileptiform seizures are not infrequent in cases of brain tumor. If these seizures are of the Jacksonian type, it is a valuable localizing sign. On the other hand, many brain tumors present as their only symptom for a period of years general convulsions similar to those of essential epilepsy. A report is made of seven such cases of verified brain tumor that occurred in the private practice of Dr. Charles E. Dowman and myself. Dr. Dowman performed all operations.

### *Report of Cases*

Case 1.—Mr. B., aged 34, was first seen by me December 5, 1917, in status epilepticus. He had been unconscious for twenty-four hours and had had about twenty-five convulsions in that time. The first of these, which initiated status, began on the street-car on his way home from work. He was brought to the hospital, where the seizures continued despite liberal use of morphine and chloroform by his family physician. Lumbar puncture was done and 30 c.c. of spinal fluid, which was negative in every respect, removed, after which there was only one more convulsion and he recovered from status.

In June, 1916, the patient experienced his first convulsion with loss of consciousness. At the time of the fourth, in April, 1917, an aura, consisting of a pull of the head toward the right, was noted. In August, 1917, he had his fifth seizure, fell down the steps and was unconscious ten minutes. The next attack precipitated status.

Mr. B. had contracted syphilis in 1908 and had been treated with five injections of salvarsan, mercury pills and a small amount of potassium iodide. Two recent blood Wassermann reactions prior to status had been negative.

The patient was treated with low protein diet and had no more attacks until July 15, 1918; half an hour later he was conscious, but stupid and mumbling. Convulsions recurred in May and June, 1919. In September he had a series of seizures without, however, the occurrence of status. At this time 73 cells per cubic millimeter were seen in the spinal fluid, and the Wasserman reaction, while negative with 0.2 c.c. and 0.5 c.c., was strongly positive with 1 c.c.; globulin was increased. The patient was given arsphenamine intravenously for eight weeks and at this time developed attacks of petit mal. At the conclusion of this course, although there was a great increase in the globulin-content of the spinal fluid and the cell count was 80, the Wassermann reaction was negative with 1 c.c. and remained so on all subsequent examinations. The patient remained apparently well for several months and then the convulsions, which occurred at irregular intervals, seemed to change somewhat in character: there was an aura of numbness in the hands, and the head and eyes tended to turn to the right. In several attacks during which he did not lose consciousness, the right side was more affected, and the patient stated that these attacks would begin in the right side of his face. With our present knowledge, this sign would suggest tumor, although neurologic examination was negative at that time.

In 1921, at irregular and sometimes prolonged intervals and without reference to convulsive seizures, there would be periods of aphasia in which the patient, while apparently perfectly conscious, would make stuttering sounds in an effort to speak. Such periods would last from a few moments to a day or two. About the same time, slow but definitely progressive disturbance of memory was observed. About 1924, severe frontal and bitemporal headaches of brief duration began to occur at irregular intervals; there was no associated vomiting. The next year vision was somewhat diminished

\*Read before the American Psychiatric Association, Atlanta, Ga., May 10, 1929.

in the right eye. Early in 1926 there were occasional periods of incontinence of urine.

March 30, 1926, the patient was particularly stupid and dull, and showed impaired memory. Superficial and deep reflexes were questionably increased on the right; Babinski's sign and ankle clonus were absent. Slight swelling of the right optic disc was seen. Romberg's sign was positive. His gait was unsteady and there was a slight limp on the right. Objectively there was no weakness or inequality in the muscle groups of the two sides. At this time the cell count of the spinal fluid was 3 and there was a slight increase in globulin. Roentgenographically, areas of calcification were located in the left frontal lobe well in front of the precentral convolution, which were interpreted as deposits of calcium in the wall of a gliomatous cyst.

Dr. Dowman believed the patient presented definite evidence of neoplasm in the left frontal lobe. April 16 he exposed a tumor at this site. This consisted principally of a cyst, which was approximately 3 by 5 cm. and contained yellowish fluid. A mass of gliomatous tissue extended anteriorly from the cyst too far for complete removal of the whole tumor. Subtemporal decompression was done.

The patient made an uneventful recovery from operation and was given roentgen therapy; luminal was continued. In June, 1926, he was in excellent condition; he had had no convulsions, nor speech disturbance, and his symptoms were markedly improved. In June, 1927, his first post-operative convulsion was followed by aphasia, and radiation was resumed. At the present time this patient is in reasonably good health and is able to follow a light occupation the greater part of the time.

*Comment.*—In retrospect, syphilis probably played no part in this patient's disturbances in spite of the history of syphilis and one positive Wassermann reaction on his spinal fluid. Moreover, the first change in character of the convulsive seizures, together with the aphasic periods and other phenomena suggesting localization should have drawn attention sooner to the probability of a lesion of the brain. I now believe that this patient's so-called epilepsy was dependent from the first upon a slow-growing glioma.

*Case 2.*—A farmer, aged 24, began in 1915 to have nocturnal attacks of unconsciousness, during which he would bite his tongue. The duration was from two to five

minutes. At first they were frequent, occurring almost every night, but gradually they became less frequent. Progressive, severe, frontal headaches, which were worse at night came on in December, 1922. Vomiting of the projectile type, which, however, ceased after two or three months, was associated with the headaches.

In October, 1923, the patient became lethargic and incontinent of urine and was admitted to the hospital. He was apparently unaware of his surroundings, and swallowed with difficulty. Marked choking of the optic discs with small hemorrhages was seen. There was marked weakness of the left side of the face. Spinal fluid was negative in every respect, as was the Wassermann reaction on the blood.

Evidence pointed to tumor of the right frontal lobe. However, Dr. Dowman decided to do a ventriculogram: when the needle was introduced for this purpose, there was sudden escape of an ounce or more of thick yellowish fluid, so the presence of a gliomatous cyst in the right frontal lobe was established. Immediately after the liberation of this fluid, the patient brightened up markedly, was able to swallow without difficulty, talked freely, and said he felt better. The incontinence also cleared up. A few days later a large cyst on the right frontal lobe was exposed, which contained at that time fully four ounces of fluid. It was impossible to remove the tumor, so roentgen-therapy was administered.

A year later the patient returned to Dr. Dowman with evidence of recurrence, and he died October 2, 1924. The whole right frontal lobe was replaced with soft gliomatous tissue.

*Comment.*—The first evidence of disturbance was occurrence of major epileptiform attacks of the essential type. These attacks continued until 1922 and constituted the only evidence of any disturbance in health. It was thus seven years after onset that symptoms suggestive of focal lesion of the brain occurred. From the size of the neoplasm, it is reasonable to infer that epileptiform attacks from the first were due to the slowly growing tumor.

*Case 3.*—About January 10, 1923, a man, aged 28, had his first attack of unconsciousness, which recurred ten months later. Apparently there had been no aura, but those who had observed an attack said that he would begin to mumble, become rigid and unconscious, and that during the period of unconsciousness, which would last about



five minutes, he would become convulsed, bite his tongue, and foam at the mouth. When he was first examined in January, 1924, nothing was found to point to a focal lesion and the case was considered one of essential epilepsy; he was treated with phenobarbital, gr. ij, each night. The epileptiform seizures, however, continued, and in March negative neurologic and ophthalmoscopic examination was made by Dr. Dowman. Fifteen months later the attacks had become more frequent, although phenobarbital had been increased to 3 grains daily. The character of the attacks began to change: he would have periods of aphasia, but would be conscious and at the same time would clench his hands. In June, 1925, Dr. Harvey Cushing examined the patient without finding any cause for the epileptiform attacks.

In November, 1925, definite signs on the right were discovered by Dr. Dowman. These were paresis of one side of the face, weakness of the arm and to a less extent of the leg, astereognosis, disturbance of joint sense of the fingers and toes and exaggeration of the deep reflexes. There was no choking in either eye, nor headache, and no vomiting. Dr. Dowman thought that a left subcortical lesion in the Rolandic region, probably tumor, was present. Just in front of the Rolandic area and at a depth of 4 cm. from the surface such a tumor was found. The patient died three months after operation. A large glioma involving almost the whole at the left hemisphere was exposed at necropsy.

*Comment.*—General epileptiform seizures constituted the only symptoms for nearly three years. In May, 1925, there was some change in the character of these attacks, but no objective data pointing to a lesion of the brain. Headache, vomiting, and choked discs were never present, in spite of the enormous size of the tumor.

*Case 4.*—A farmer, aged 35, had had characteristic, major epileptiform seizures for two years prior to being examined in February, 1924. The attacks at first occurred one to three times a week, but later several times a day. There had been no vomiting, no headache and no visual disturbances, but for the preceding few weeks mental confusion had been noticeable. After some of the attacks the patient would be unable for a short period to use the left hand and the grip of that hand was slightly weak. Dr. Dowman saw changes in the eye-grounds with early choking of the discs; paresis of the left facial nerve was also noted. Ventriculogram showed absence of air in the anterior and

inferior horns of the right ventricle from which tumor in the right frontotemporal region was diagnosed. A solid glioma in the region of the right Sylvian fissure was exposed. The patient continued to have attacks lasting a few seconds and associated with the feeling of strangeness which had been present a short time before operation and not accompanied by loss of consciousness. After he had received a number of roentgen treatments he was able to resume his work and attacks were less frequent. A year later his general condition was excellent. He got along well until sudden death January 8, 1929.

*Comment.*—Major epileptiform attacks were present two years before other symptoms, particularly a change in character of the attacks, ensued. The substitution of convulsive seizures with loss of consciousness by feelings of strangeness and unreality without loss of consciousness is of interest. When mental confusion and delirium occurred there was sufficient neurologic evidence to justify the diagnosis of an organic lesion of the brain.

*Case 5.*—A white woman, aged 38, who was first seen by Dr. Dowman November 9, 1921, gave a history of epileptiform seizures beginning about eight years previously, which continued at infrequent intervals for about two years. After a remission of two years, such seizures recurred from time to time until 1920. These consisted of general convulsions during which the patient would bite her tongue, remain unconscious fifteen or twenty minutes and then apparently fully recover. About four years before examination headache appeared and persisted except for occasional periods of months. Two or three months before she consulted Dr. Dowman signs of organic lesion of the brain were observed. These consisted of almost daily projectile vomiting, double vision, failing sight, marked changes in disposition and psychic disturbances. These psychic disturbances were characterized by peculiarities of conduct such as going with scanty clothing, outbursts of laughter, disorientation and indifference to sphincter control.

The patient appeared drowsy and her memory was impaired. The corneal reflex was absent on the right, normal on the left. The right pupil was slightly larger than the left and both were sluggish to light; slight weakness of both external rectus muscles was observed. There was marked choking of the optic discs with several small hemorrhages in the right fundus. Left homonymous hemianopsia was questionable. Slight facial weakness was present on the left. Coarse tremor



of the outstretched fingers of the left hand was present. Roentgenograms of the skull showed some convolution atrophy, particularly in the frontal region, and ventriculogram showed collapsed right ventricle. Pre-operative diagnosis was tumor in the front part of the right cerebrum.

Convolutions of the frontal lobe were flattened and of a yellowish tint. In the anterior part of the frontal lobe a fluctuating cyst could be felt and this came up almost to the cortical surface. It was punctured and several cubic centimeters of clear yellowish fluid removed. Deeper puncture posteriorly disclosed a similar cyst. The operative diagnosis was large infiltrating glioma of the left frontal lobe. Decompression was performed. On the third day after operation bronchopneumonia developed and the patient died ten days later. Necropsy was not permitted.

*Comment.*—This patient at the age of 30 began to have attacks in all respects identical with those of essential epilepsy. Except for headache, which appeared four years later, there was nothing to suggest a focal lesion until two or three months before examination. On account of the size of the tumor and its cystic degeneration, it is reasonable to suppose that the slow-growing tumor produced for many years as its only symptom epileptiform attacks.

*Case 6.*—A man, aged 28, was examined November 8, 1921. He gave a history of general epileptiform convulsions beginning eight years earlier. His attacks were characterized by convulsions and loss of consciousness with biting of the tongue; both sides were equally involved. The attacks occurred often twice a day and at times he would be free of them two or three months. He was treated with bromide. Four years before examination the attacks had ceased and the patient became absent-minded and impatient. In July, 1921, the patient suddenly became blind in his right eye, and two weeks later in the left eye. Jerking of the eyes was first noticed then and he was unable to stand or walk alone.

The pupils were widely dilated and did not react to light. Nystagmus was marked. There was a high degree of choking of each optic disc. Slight weakness of the left side of the face was observed. Ataxia on the finger-to-nose test, positive Romberg's sign, and adiodokinesia were demonstrated. The deep reflexes were all hyperactive and the knee-jerk was more marked on the right. The reflexes were otherwise normal except that the Gordon was present on both sides,

more marked on the right. There was some disturbance of bladder control. Roentgenograms disclosed the changes of convolution atrophy in the frontal part of the skull and considerable distortion of the sella turcica. Ventriculogram revealed, in addition to an increase of pressure during the performance of the operation, that all of the air injected remained in the posterior half of the right ventricle, none escaping through the foramen of Munro into the left ventricle. Tumor between the frontal lobes occluding the foramen of Munro and probably extending down to the region of the sella was diagnosed.

After craniotomy on December 4, 1921, the patient's condition did not warrant further procedure and right subtemporal decompression was performed. On December 14 a second operation was done, but the technical difficulties were too great to justify any effort definitely to expose the tumor. At necropsy on December 17, a large infiltrating glioma, apparently originating in the anterior part of the corpus callosum and extending into the adjacent part of each cerebral hemisphere, was discovered.

*Comment.*—In this case there was a long history of epileptiform seizures before any evidence to suggest structural changes in the brain. There was no history of headache, although there was an extremely high degree of choking of both discs with complete blindness, and also increased intracranial pressure. Symptoms suggested cerebellar lesion rather than the one seen at necropsy. Epileptic symptoms disappeared about the time mental symptoms appeared. This case suggests the advisability of thorough periodic examination of epileptic patients: such examinations in this case would have revealed changes in the eye-grounds much earlier.

*Case 7.*—A man, aged 29, who was first seen July 19, 1926, gave a history of four general epileptiform seizures during more than four years. He said that for about an hour before a convulsion there would be twitching in both eyes, then general convulsions with unconsciousness would occur, during which time he would bite his tongue. The last attack came on seven weeks before examination. Convulsions were the only symptom until July, 1925, when an inability to see properly on looking toward the right was noted. This progressed so far that in the spring of 1926 he became totally blind in the right visual field. January, 1926, the patient observed weakness in the right arm and hand which had been progressive. It was

not accompanied by any sensory disturbance. In May similar weakness appeared in the right leg so that he limped. The patient had been subject to headaches more or less all his life and they had not been worse since the onset of the present illness. He had not vomited.

Examination revealed slight swelling of both discs, right homonymous hemianopsia, evidence of weakness of the right arm and leg, absence of the right abdominal reflex, exaggeration of the deep reflexes of the right side, positive right Babinski's sign and a mild spasticity. Dr. Dowman thought there was sufficient evidence of neoplasm in the left occipital lobe to warrant exploration.

Search for a solid tumor in the left occipital lobe was not rewarded, but a portion of the brain in this region was removed for microscopic study, with the idea that it might show gliomatous tissue. Dr. E. L. Bishop, of the Steiner Clinic, reported it gliomatous: histologically it was astrocytoma fibrillare.

One week after operation the patient experienced a general epileptiform attack, but gradually improved and later was given roentgen therapy. More than a year later he was in good condition except for some aphasia and moderate spastic paralysis of the right arm and right homonymous hemianopsia. On the whole, however, he was much improved, headache had disappeared and epileptiform attacks had not recurred. He has not been heard from since.

*Comment.*—This patient had general epileptiform attacks for a period of four and a half years prior to the appearance of any focal symptoms of organic lesion of the brain.

#### *Discussion*

It is impossible to draw conclusions from this small number of cases, but it is of interest to quote from two personal communications on the subject. Dr. Ernest Sachs, of St. Louis, a neurologic surgeon of experience, writes,

"Regarding your question about the occurrence of epileptic attacks over a period of years which finally prove to be due to brain tumor, we are seeing more and more of these cases. I have one case in my records of a woman who had been diagnosed as epilepsy for thirteen years in our own dispensary and then at the end of that time I removed a huge endothelioma from her frontal region. I have in the hospital at present a woman who had a frontal lobe tumor which started with epileptic convulsions a year ago, and I

have another man who had a frontal glioma who has had convulsions for several years. It is really surprisingly common, so that I have taken the attitude that a patient who has epileptic convulsions and hasn't got syphilis ought to be suspected of having a brain tumor."

Dr. Charles H. Frazier, of the University of Pennsylvania, writes:

"I was rather under the impression that epilepsy was a prominent symptom in ten per cent of our brain tumor cases. I have not time now, I am afraid, to give you the exact figures for all of our brain tumor cases, but I do know from a recent investigation that in the occipital lobe lesions convulsive seizures were a conspicuous symptom in 25 per cent. How many of these had been treated primarily for epilepsy I am not sure."

Dr. William A. Smith presented before the last meeting of the Medical Association of Georgia a study of four hundred cases which were seen in private practice and in which convulsive seizures was the chief complaint. Of the group in which onset occurred after the age of 25, verified brain tumor was present in 28.4 per cent, and was the most frequent organic lesion of the brain. This study emphasizes the importance of repeated neurologic examinations as convulsions may be the sole evidence of organic disease of the brain for a long time before other signs or symptoms appear.

Other authors might be cited to the same effect if space permitted.

As a result of my studies I believe that, while the occurrence of brain tumor among institutional cases of epilepsy of all ages is not very different from that in the general population, the occurrence in the group in which onset is late and which is seen in private practice is high. Patients of this group who ultimately develop signs of brain tumor rarely find their way into institutions devoted to the care of epileptic or insane persons.

#### *Summary*

Seven cases in which there were convulsive seizures in no way different from those of so-called idiopathic epilepsy for an average period of six years without other symptoms,



and in which the average age at onset was 27 years, are reported.

While conclusions can not be drawn from so few cases, I believe, with the support of other students of the subject, that, when epilepsy occurs for the first time at or after the age of 25 years and neurosyphilis can be excluded, brain tumor should be suspected and the patient subjected to frequent neurologic examinations.

## GASTRIC SYPHILIS\*

### *Case Report and Discussion*

A. D. LITTLE, M. D.

Thomasville

My object in making this report is to present a condition rarely diagnosed and to emphasize the fact that a diagnosis is difficult to make and yet more difficult to prove.

In the history the following facts should be noted:

1. The patient did not present the physical picture of a person who had carcinoma of the stomach. There was an absence of the typical cachexia of carcinoma. She was active and virile, not hopeless and depressed. The appetite was good and, although emaciated, her tissues were in good condition.

2. She did not give the true picture of gastric or duodenal ulcer. The pain was severe, but was usually worse after a full meal, and vomiting gave relief. There was the striking absence of hunger pain of ulcer.

There was no history of hemorrhage, which one would expect in a case of ulcer which has gone so far as to produce an obstruction of the pylorus. Some blood may be found after using the stomach pump, as in this case, and this is to be expected. The history becomes more important and impressive as other diagnostic facts are developed.

In this case the first intimation that we might be dealing with gastric syphilis came from the X-ray department. This diagnosis was further suggested when a four plus Wassermann test was reported and again when two doses of neo-arsphenamine caused striking

disappearance of the symptoms. The pathological findings at autopsy verified the diagnosis of gastric syphilis.

M. B., colored, female, age 42.

Admitted to hospital 11:30 p.m., November 29, 1927. Severe pain in epigastrium accompanied by protracted vomiting. Father died suddenly at age of 45. Had no brothers or sisters. Married twenty years; no pregnancies; menstruation began at age of 12 and had always been normal. Had usual diseases of childhood, except diphtheria and scarlet fever. Denied venereal infection.

She had never been seriously ill until two years ago, when she began to have severe pains in the upper abdomen. These acute attacks lasted for thirty minutes to one hour and always came on after a large meal. She was free of indigestion and was never nauseated until a year ago. Relief followed vomiting. There was never any visible blood in vomitus. Patient was always hungry, never seeming to get enough food, and a heavy meal was always followed by an attack of pain which would continue until stomach was empty. With the exception of these attacks and indigestion, the patient felt fine and continued to work, although she lost weight steadily. During the five weeks before admission, all food, both solid and liquid, was vomited. She had to give up her work and remain in bed.

The most severe attack she had experienced occurred on the night of admission after an unusually heavy meal consisting of mullet, sweet potatoes and cabbage.

The physical examination upon admission to the hospital showed a well-developed but poorly nourished colored female, with a tumor mass in the upper abdomen. This mass resembled the outline of the stomach, was firm and stood out prominently. Peristalsis was plainly visible when vomiting occurred. After the stomach was emptied the mass disappeared and could not be palpated.

On the second day after admission, laboratory examinations were made, with the following findings:

#### *Gastric Analysis*

Occult Blood .....	0
Lactic Acid .....	0
Free Hcl. ....	0
Combined Acidity .....	18
Total Acidity .....	18
Mucus .....	Normal
Bile .....	0

#### *Microscopic Findings*

Organisms having morphology of Boas-Oppler bacilli; food remains, oil globules, pus, few R. B. C.

\*Read before a staff meeting of the John D. Archbold Memorial Hospital, Thomasville, Ga.



<i>Blood Count</i>	
R. B. C. ....	3,710,000
W. B. C. ....	5,100
Haemoglobin .....	70% (Talquist)
<i>Differential</i>	
Polys. ....	61%
Eosin. ....	1%
Baso. ....	1%
Lympho. ....	31%
Malaria .....	None found
Wassermann .....	4 plus
<i>Stool</i>	
Occult Blood .....	Absent
Microscopic: No undigested food, occasional pus and R. B. C. present.	

A gastro-intestinal series was unsuccessful and following this the patient was given nutritive enemas and .01 grain of atropine sulphate hypodermically every three hours up to the point of tolerance, when a second X-ray was made, with the following report:

"I am inclined to believe that we are dealing with a prepyloric ulcer on the posterior wall of the stomach. The atropine relieved the spasm very little and there was an almost total retention at the end of six hours. I believe that it would be worth while to consider the ulcer to be luetic and I suggest treatment for same. I do not believe the clinical evidence is sufficient for the amount of pathology present. This favors lues. The spasm was so great around the pylorus that it was impossible to determine whether a gumma was forming; however, I could not palpate any mass in this region while fluoroscoping the patient. If it is luetic, it should respond to treatment very promptly."

The patient was given the .4 gram of neo-arsphenamine the following day and a few days later was able to retain water and clear broth. One week later she received .6 gram of neo-arsphenamine and two days later was given thickened broths, albumen and gelatine jelly without causing any discomfort or vomiting. She was permitted to go home and asked to report at the hospital on a given date. She was readmitted on December 21st when she reported that she had been fairly comfortable and had not vomited, even though she had eaten sweet potatoes. After receiving another dose of neo-arsphenamine and a bottle of medicine containing iodides and mercury she was again permitted to go home for one week.

On the night of January 12, 1928, she was readmitted in great pain and with the abdomen enormously distended. It was evident that an obstruction somewhere along the digestive tract had occurred. The abdomen was opened, showing the stomach dilated and filling the entire abdominal cavity. The

pylorus was firmly obstructed. After removing some four quarts of stomach contents by stomach pump, a posterior gastro-enterostomy was performed, as a pyloroplasty was out of the question on account of the fibrosis at the pylorus. The gastro-enterostomy proved very difficult as the stomach walls were thick and leathery and not easily inverted. This difficulty prolonged the operation and the patient failed to react.

Post mortem notes were given by Dr. Mary J. Erickson, pathologist:

Body of emaciated colored woman showing oedema of lower extremities, flabby atrophic muscles, a recent abdominal incision about eight inches long. Abdomen showed numerous adhesions, stomach dilated and covering loops of intestine; stomach showed that recent posterior gastroenterostomy had been done. Stomach was dilated, stiff, thick walled, and contained about three quarts of greenish, fermenting gruel with small particles of meat. Intestines showed no thickening of walls, were distended with gas, showed practically no fecal matter and no obstruction or tumors. Mucosa of stomach showed atrophic condition, no ulcerations; pylorus dense, thick and only a small probe could be passed; no solid particles could pass through the opening. Numerous enlarged lymph nodes found throughout abdominal cavity were firm and white.

Liver, smaller than normal; showed an adherent perihepatitis and contractions of organ; fibrous tissue considerably increased; organ firm and dark in color. Gall bladder, normal; emptied freely. Kidneys, pancreas, adrenals and bladder, normal. Tubes, ovaries and uterus had been removed; cervical stump normal.

Chest: lungs showed considerable anthracosis, few adhesions of left pleura; lung, air-containing throughout, but showed a slight passive congestion of the lower lobes. Heart, normal size; pericardial sac contained a slightly increased amount of fluid, 100 c.c. being present, clear, amber color. Heart muscle firm; vessels sclerotic; few sclerotic plaques in aorta.

From the fibrous and contraction of pylorus, the first impression was scirrhus carcinoma and, second, fibrosis, probably syphilitic origin.

Microscopic examination: (1) stomach infiltration and fibrosis of wall; (2) chronic, atrophic catarrhal gastritis; (3) lymph nodes showed old lymphadenitis.

Dr. Erickson obtained from Dr. A. S. Warthin, University of Michigan, the following opinion on the case from the specimen sent him:

(1) Material from your patient shows nearly healed gastric ulcer. Inflammatory infiltrations and fibrosis of stomach wall, most probably old syphilis. (2) Severe chronic atrophic catarrhal gastritis. (3) Lymph nodes show old lymphadenitis, but nothing characteristic of syphilis. Process in stomach wall is so old that its syphilitic nature can not be absolutely decided. No neoplasm in part sent.

Discussion by Dr. R. A. Hill: Dr. Little has presented a very interesting case, interesting not only for its rarity but for its curious and variable symptomatology.

Up to 1905 our knowledge of gastric syphilis was obtained by post mortem examinations only. After this, to about 1910, the response to antisyphilitic treatment was a great aid in the diagnosis. During the last ten or fifteen years this subject has been studied and developed by a number of eminent men, both in this country and in Europe, and has been found rare, although by no means as uncommon as formerly supposed, the ratio being about one to one hundred of other organic lesions of the stomach such as cancer and ulcer.

Clinically, gastric syphilis may be represented by a diffuse gastritis, luetic ulcer, gumma, or a diffuse pyloric infiltration. Another interesting phase of gastric syphilis is its difficult diagnosis due to the frequent occurrence of gastric disorders other than luetic in patients with a four plus Wassermann test. I do not know of a disease about which one will feel a greater uncertainty in diagnosis. The point I am trying to bring out is that one may have a patient with cancer of the stomach and at the same time the patient may have syphilis; or one may have a pyloric or duodenal ulcer or cancer. One will frequently see patients complaining of chronic indigestion with a group of symptoms simulating hyperacidity or an achylia, with no visible extrinsic cause except possibly a normal appendix. The gastric contents in these patients may show achylia, subacidity, with or without occult blood in the stool. The Wassermann test being negative, the condition is usually classified or diagnosed as gastric neurosis. These patients are usually out on a diet with symptomatic treatment according to the findings of the gastric contents, with very little if any permanent relief, and advised to return in a month. This is the class of patients in which I usually give increasing doses of potassium iodide and mercury for two or three weeks when repeated Wassermans are again done and frequently found to be strongly positive. The rarity of gastric syphilis, and the possibility of making

a clinical diagnosis with attendant excellent therapeutic results should make one bear in mind at all times the possibility of syphilis in individuals who fail to respond to the accepted medical and surgical measures for lesions in the upper abdomen. For this reason I say that syphilis of the stomach is very difficult to diagnose; one can not be sure of the diagnosis until after one has made a thorough therapeutic test. It must always be borne in mind that, just as a positive Wassermann reaction may be independent of gastric symptoms and gastric pathology, a luetic affection of the stomach may exist with a negative Wassermann reaction.

Whether there is cancer or ulcer, if a four plus Wassermann is present, it is well to give antisyphilitic treatment for a reasonable length of time before attempting operation.

The gross pathology of gastric syphilis which was brought out by the autopsy of this patient is also an interesting feature of the disease. I saw the stomach of this patient and it did not strike me at that time as being one of gastric syphilis. The pathology usually consists of a terminal mutilating sclerosis resulting in contractures involving the stomach wall, sometimes causing an hour glass contraction or an annular prepyloric contraction. One of the characteristics is that they are broad. There are infiltrations of the wall resulting sometimes in a marked diminution of the capacity of the stomach. The stomach wall is usually thickened. Due to the resulting pyloric obstruction, the stomach may be enormous in size which is due not merely to the loss of muscle tone, but to actual muscle hypertrophy and dilation, as with a heart with stenosis or obstructed outlet. Therefore, the obstructed pylorus or duodenum causes ultimate gastric dilation and insufficiency.

Dr. A. D. Little: This case fooled us in the course of treatment. Each time I saw the patient she seemed better. There was certainly no evidence of obstruction, and I was greatly surprised when she came into the hospital the last time with a distended stomach. Five weeks previous to this time the patient had been in bed, but she improved and was able to do washing and ironing. Had her stomach been only washed out she might have lived longer. It looked as if a posterior gastro-enterostomy was indicated, but the thick, leathery condition of the stomach wall had not been foreseen.

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AUGUSTA SESSION, May 14, 15, 16.  
First meeting of House of Delegates, Tuesday, May 13th.



## CASES REPORTED AT THE HARBIN HOSPITAL STAFF MEETING†

R. N. JOHNSON,\* M. D.  
Rome

*Case 1.*—A man, 24 years of age, was struck by an automobile and was brought to the hospital in an unconscious condition, being attended by Dr. W. P. Harbin. X-ray of the skull failed to reveal a fracture, but he did not regain consciousness while in the hospital. The interesting feature in this case was the fact that the temperature by axilla went to 108 degrees. At the staff meeting there was a discussion as to how high a patient's temperature could go and the patient recover. No definite decision was reached, but several staff members had seen patients with a temperature of 106 degrees recover.

*Case 2.*—An infant, five months old, seen by Dr. R. C. Maddox, had been given some cough medicine by the home physician, following which the infant had vomited and lapsed into unconsciousness. After a convulsion had occurred, the parents brought the baby to the Harbin Hospital. The child was in a cyanotic condition, which oxygen failed to relieve. Blood examination showed a slight leukocytosis and marked anemia. Lumbar puncture was done and the spinal fluid was found to be normal. The baby was given a transfusion and improved for awhile, but died the next day.

This patient was one of twins, the other of whom also had some of the cough medicine given to it, vomited, and had a convulsion. On examination here, a few bronchial rales were heard and a diagnosis of bronchial pneumonia was made, although an impression of some influenzal infection was given. The parents carried the baby back home and it recovered in a few days.

*Case 3.*—An obstetrical case of Dr. Shaw was discussed by Dr. Maddox at the staff meeting. The mother had a long-drawn-out labor and the baby's head became jammed in the pelvis. Dr. Shaw finally had to use forceps to deliver the baby. The child had a very pronounced intra-cranial hemorrhage and died within twenty-four hours.

*Case 4.*—A farmer, 28 years of age, healthy-looking, was admitted to the hospital October 8, 1929, having complained for three days with pain and localized tenderness in the right side of the abdomen and vomiting. He had a total leukocyte count of 22,350 and urinalysis showed considerable

pus and albumin. Dr. R. M. Harbin saw him and a diagnosis of acute appendicitis was made. Operation through a gridiron incision revealed a beginning necrosis of the appendix which was adherent to the post-cecal wall. As the diagnosis was apparently confirmed, no search for other pathology was made. The appendix was removed and the incision closed without drainage. Convalescence was painful, being attended with considerable fever, and it was thought that a moderate peritonitis existed. He was dismissed, however, on the eighteenth post-operative day, with no infection of the incision.

Five days later this patient returned to the hospital in another attack of pain which continued for four days. A tentative diagnosis of intestinal obstruction was made. Eleven days later he was again admitted with the same diagnosis and advised to undergo a second operation, to which he consented. A cone-shaped Meckel's diverticulum two and one-half inches long was found about three feet from the ileo-cecal valve. The diverticulum was resected, leaving no indentation of the normal outer curve of the ileum, and the patient convalesced satisfactorily. He remarked that the pain in the last two attacks was different from that of the acute appendicitis and that he had been subject to transient attacks of colic with vomiting for thirteen years, sometimes once a month, but at one time going two years without symptoms. Being a healthy man, there were no other conditions that would account for these symptoms.

*Case 5.*—A woman, 27 years of age, came to Rome from Oklahoma, where she had been told that she had gall-bladder trouble. Dr. Routledge was called in to see her several times and had to give her morphine, sometimes as much as  $\frac{1}{2}$  grain, for the pain. Finally Dr. Routledge refused to give her more morphine and advised her to come to the hospital for surgical treatment. At operation a double salpingitis and a cyst of the left ovary were found. The gall-bladder was apparently normal. The blood Wassermann was positive and anti-luetic treatment was begun. The patient had an uneventful recovery. Dr. Martin and Dr. Garrard discussed this case at the staff meeting as Dr. Routledge was out of town.

*Case 6.*—A child, two years old, who was playing with a paper sack which caught fire, sustained first-degree burns on the face, arms, and knees. On the next day the temperature rose to 101 degrees and persisted for three days. The following morning the baby suffered a complete collapse and was rushed to

†Reported at a meeting of the staff of the Harbin Hospital, Rome, Georgia, December 5, 1929.

\*Secretary pro-tem.



the hospital in an unconscious condition, being attended by Dr. Temple and Dr. Maddox. Upon admission the temperature was 104 degrees and the pulse rate was between 180 and 200 per minute. The abdomen was greatly distended and there was a typical scarlet fever rash on the body. Elimination was attempted by the use of epsom salts, castor oil, enema, and pituitrin. At 5 p.m. the child had a convulsion. For forty-eight hours the urine was scanty and highly colored, contained albumin and pus, and was loaded with granular and hyaline casts. Finally after good elimination, the temperature came down and the pulse rate dropped. The leukocyte count during the illness ranged from 15,000 to 18,000. The patient recovered with desquamation. The impression was uremic condition with acute nephritis. There was some disagreement as to whether the child had scarlet fever as there were no symptoms or signs except the rash, throat and ears being negative and there being no eosinophilia. The question was raised as to whether scarlet fever can get into the body through a skin injury instead of the usual channel of the throat.

## CANCER OF THE MOUTH

### *A Preventable Disease*

J. L. CAMPBELL,\* M. D.  
Atlanta

The above title may seem to some a presumptuous statement; yet it is true. We know the predisposing causes of cancer of the mouth and how to prevent it; yet from five to seven thousand people die annually in the United States from this condition. Although, as Ewing states, "It is among the most accessible of cancers and readily recognizable in its early stage, it is yet one of the most fatal of malignant diseases." The immediate cause of this large mortality is failure of co-operation between the patient and the doctor, due to lack of popular education.

Age and sex play an important part in the cause of this malady, for more than 85 per cent of cancers of the mouth occur in men past 45 who have used tobacco to excess for many years and who have otherwise neglected to care for their mouth. There-

fore, the most prominent factors in causing cancer of the mouth are: the excessive use of tobacco; oral sepsis; neglect of sharp, broken, or irregular teeth which cut or bruise the tongue or inside of the cheek; neglected deposits of salivary calculi around the neck of the teeth; and ill-fitting dental plates. These, one and all, can be corrected.

Cancers of the buccal cavity occur as a persistent ulcer on the lower lip, as a lump or sore on the gums, as an indurated ulcer, opposite a broken tooth, on the margin of the tongue or inside of the cheek, as an ulcer at the junction of the anterior pillar of the tonsil and the base of the tongue. Where an ill-fitting dental plate is responsible for the irritation the cancer is in the floor of the mouth.

Cancers of the mouth, when compared with those in other locations, run a rapid course and metastasize early. There are two reasons for this: first, they arise from the squamous cell layers of the mucous membrane; and second, their growth and rapid metastases are hastened by the constant muscular action and presence of infecting organisms in this location. General metastases rarely occur, but the lymph nodes of the neck are quickly involved and, as a result of secondary infection, break down early. The absorption of toxins and the pain from the infection and infiltration in the mouth, rendering the intake of food well nigh impossible, soon close the patient's career.

There are certain conditions known as pre-cancerous lesions in and about the mouth, such as a scaly spot on the lip of a smoker or a sore opposite the site where the cigar or pipe stem is held against the tongue, which, if neglected, will ultimately develop into cancer. If recognized early and treated properly, these may be cured by simple means; remove them and a cure may follow at once. Leukoplakia will develop into cancer if neglected; but it may be cured by thorough application of an electric cautery. An indurated area opposite a broken tooth or where a dental plate has exerted undue pressure may be cured by removing the cause of irritation and destroying the induration with cautery. Regular systematic visits to the dentist is good insurance against cancer of the mouth—provided

\*Chairman of the Cancer Commission of the Medical Association of Georgia.

he does not apply mild escharotics to an already existing sore.

Early diagnosis can be secured only by well-directed popular education. Although Ewing says that cancer of the mouth is "readily recognized in the early stage," he did not think of the general practitioner who sees perhaps only one or two in the course of years. That individual must, therefore, be alert, bearing in mind that he is dealing with a deadly malady. Only 18 per cent of persons bitten by poisonous snakes die, while 100 per cent of neglected cancers of the mouth are fatal.

Until it is proven otherwise, it is safe to consider as malignant any sore or lump in or about the mouth if it has resisted simple remedies for a month. During this time syphilis, the various forms of angina, gingivitis, and simple ulcers will have been eliminated, and we may be sure that we are dealing with cancer. It is often necessary to do a biopsy to insure diagnosis; but, in doing this, great caution should be exercised. A pathologist experienced in frozen section diagnosis should be at hand, so that (should a malignancy be revealed) immediate treatment can be instituted. Delay, once the lesion has been invaded, invites metastasis.

A positive Wassermann reaction does not exclude malignancy, for the two lesions may co-exist and cancer of the mouth in a luetic individual is almost certainly fatal.

There is still difference of opinion in regard to treatment. Early cancers and pre-cancerous lesions respond to cautery, fulguration, and similar methods of destruction. Radium has given good results in the hands of some, but it is difficult to apply in a location where there is such constant muscular changes in progress. Also, unless properly applied, it produces such marked fibrosis that the results are worse than the disease. Each case requires individual study, for it is a law unto itself. However, intense roentgen radiation of the area of lymph drainage is advised by all, with subsequent block dissection of the neck should palpable nodes be present. In my own experience, complete destruction of the lesion by cautery, followed by deep roentgen radiation of both sides of the neck, and later block dissection, where

indicated, has given very satisfactory results.

The purpose of this paper is to call to the attention of the profession the prevalence of cancers of the buccal cavity, their apparent cause as shown by the history in thousands of cases, the existence of pre-cancerous lesions which may be easily cured by proper treatment, and the duty incumbent on every doctor who has an opportunity to address a public meeting to issue a warning against the excessive use of tobacco, the danger of oral sepsis, broken or irregular teeth, and ill-fitting dental plates, and the peril of neglected pre-cancerous lesions.

23 Doctors Building, 478 Peachtree St., N. E.

## THE TREATMENT OF HEMOGLOBINURIC FEVER\*

### Case Reports

H. M. TOLLESON, M. D.  
Smithville

*Mr. President, Gentlemen of the Third District Medical Association, and Visitors:*

I wish to preface the text of my paper with a few explanatory remarks. In the first place I do not wish to give the impression that I am offering anything new or original in the treatment of black water fever. The chief feature in the treatment as outlined in my discussion was, I am told, first recommended by Dr. Cranford, of Sasser, Ga. My information concerning his work is very limited as I have been unable to find any published account of it. As a matter of fact, I am informed in a recent letter by the librarian of the Wesley Memorial Library that there is no account of any form of serum treatment of this disease published in English.

As for the remainder of the treatment herein recommended, it merely consists of well-known methods logically applied in this condition to meet the demands of the symptoms in an effort to counteract the unpleasant manifestations of the disease.

May I also be allowed to state that with such a small number of cases cited, the conclusions must be made with some reservations, although the results of treatment of these cases do seem to warrant our continued use and study of the therapeutic agent discussed.

I trust that in the discussion of the paper my friends who may have possibly made use

\*Read before the Third District Medical Society, Dawson, Georgia, November 13, 1929.

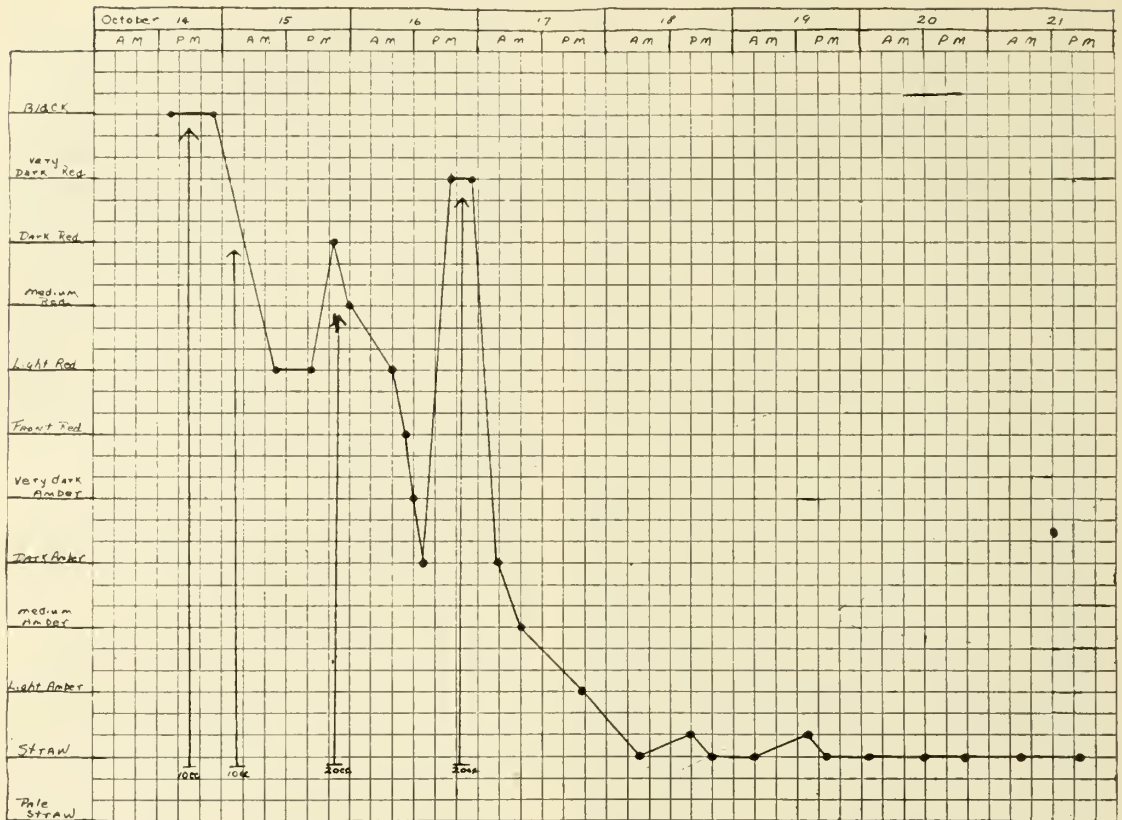


Chart showing the relation between the administration of antistreptococcal serum and the hemoglobin content of the urine expressed in terms of the appearance of the urine upon examination in bottles of the same size and shape. The

arrows indicate the time and dosage of the administration of serum. An immediate decrease in the urine hemoglobin will be noted after injections of serum in 20 c.c. doses. (Patient: Henry L., age 10 years, Smithville, Georgia.)

of the same type of treatment will give the results of same without hesitation, for I claim no priority in any respect for the work presented at this time. However, my interest has been stimulated considerably, and if opportunity presents itself I shall endeavor to make further study of this condition and of the treatment which has been so successful in these few cases.

**INTRODUCTION:** Hemoglobinuric fever, also called hemorrhagic fever, black-water fever, bilious remittent fever, etc., is undoubtedly the result of an inadequately treated malarial infection plus certain more or less unknown factors which produce a hemolysis of the blood cells. As a result of this hemolysis there is found hemoglobin in the urine, giving the disease its name and constituting the predominant symptom.

If we may take the hemoglobin content of the urine as an index to the amount of hemolysis that takes place, which is perfectly logical, we may judge the success of treatment aimed at arresting the hemolytic proc-

ess by the decrease in the amount of hemoglobin present in the urine.

It has been stated by some authors<sup>2</sup> that the onset of the disease is precipitated by the administration of quinine. Other authorities<sup>1</sup> state that this is not entirely true, although in some cases quinine does seem to increase the hemolytic process. In the light of our present knowledge, it would seem that the hemolysis is due to a hemolytic agent produced by the malarial parasites and with the possible exception of certain very rare idiosyncrasies to quinine, this drug is innocent of producing the disease.

It is not so much that quinine is contraindicated in these cases, but that it is unnecessary. For, as shown by case No. 3 cited below, once the hemolysis takes place to a considerable extent there is an auto-destruction of the malarial parasites, thus eliminating the need for the administration of quinine. On the other hand, where early treatment is successful in arresting the extensive hemolysis before all the parasites are de-



stroyed, as typified in case No. 2 below, quinine is indicated and essential and is given in large doses without any return of hemoglobin in the urine, the gauge by which we picture what is going on in the blood stream.

Whipple<sup>3</sup> suggests that the hemolysis may be due to a poison that is formed as a reaction against the malarial organisms, his theory finding basis in his recent work on the pathology of the condition in the Panama Canal Zone.

Theorize as we may, the appalling fact remains that we still have "Black Water Fever" with us, and that the mortality is alarmingly high.

TREATMENT: The causes of death are three: (1) suppression of urine; (2) exhaustion, and (3) cardiac paralysis.<sup>5</sup> Treatment should be carried out with these things always in mind.

It will be interesting at this point to briefly summarize some of the best known forms of treatment that have been used in the past.

Vincent strongly urged the use of calcium chloride by mouth and hypodermically.<sup>4</sup>

Polli advocated hyposulphite of soda.<sup>4</sup>

Lewis advised, and very sensibly, hypodermoclyses of normal saline which he believed acts favorably in the prevention of anuria.<sup>4</sup>

Methylene blue, a kidney irritant, and salicylic acid, a gastric irritant, have been recommended in the past.

Gallic acid, tannic acid, and ergot, given on a basis of preventing hemorrhage, have been tried.<sup>4</sup>

Deaderick says with good reason, "Probably the most important indication in the treatment is the prevention of suppression."<sup>4</sup>

Wright<sup>2</sup> suggests that there are many features resembling an acidosis and recommends active treatment for this.

Consideration of the causes of death and a study of the outstanding symptoms lead us into logical paths in search of treatment. The danger of the suppression of urine calls for measures to stimulate kidney activity such as diuretics (among which digitalis stands out predominantly as it serves the two-fold purpose of diuresis and cardiac support), heat and counter-irritation to

flanks and abdomen; an abundance of fluids, by mouth if possible; if not, by rectum and subcutaneously.

The severe nausea and vomiting requires, as a rule, the physician's attention from the first and in the writer's hands small doses of codeine or morphine together with thorough alkalinization have proven most beneficial.

The weakened heart muscle requires that the patient be kept at absolute rest. This precaution should be observed for from three to six weeks following the acute attack, depending upon the severity of the symptoms, age of the patient and previous health.

Blood smears should be made and if malarial parasites are found in the circulating blood, quinine should be administered, preferably, at first, in the form of the dihydrochloride intramuscularly as the capsule so easily aggravates vomiting.

If malarial parasites are found after all evidence of hemolysis have subsided a thorough course of quinine should be given as for an ordinary case of malarial fever.

As soon as the vomiting is controlled, nutritious liquid and soft diet should be given in significant quantity to maintain nutrition.

And last, but most important, the chief aim should be to arrest the extensive hemolysis of the blood, which is the most characteristic feature. Polyvalent antistreptococcic serum in some, as yet undetermined, manner seems to exert a prompt and life-saving effect, arresting the hemolytic process and in turn preventing the overflow of blood pigment into the urine.

This serum is given in 20 cc. doses subcutaneously, preferably in the abdominal wall, using a different site for repeated injections. For the accompanying pain, a hot water bottle usually suffices. The administration is repeated at 12 to 24-hour intervals for as long as seems indicated by the hemoglobin content of the urine or by actual hemorrhage from the intestinal tract which sometimes occurs.<sup>5</sup>

In the cases reported below there was a prompt diminution in the amount of blood pigment in the urine following the administration of the serum, leading one to deduce that it has a definite anti-hemolytic effect.

*Report of Cases*

*Case 1.*—Henry L., white, American school boy, age 10, was first seen on October 15, 1929. During two weeks past he had had several chills, followed by a rise in temperature and had been given quinine sulphate in small doses at irregular intervals by his parents.

On the morning of October 15 he had a severe chill while at school and was sent home and put to bed. At 7 p. m. he voided one ounce of very dark red urine, causing the first alarm to his parents. At 10 o'clock his temperature was 101 and pulse was 120. He was nauseated and vomiting and had a decided yellow discoloration to his skin and sclerae.

The patient was surrounded by hot water bottles and given 10 cc. antistreptococcic serum subcutaneously in the anterior abdominal wall. He was given 15 grains of quinine dihydrochloride intramuscularly and no further quinine was given. He was given one-half grain of codein hypodermically and a small amount every few minutes of citro-carbonate in iced water. Hot water bottles and hot turpentine stupes were applied to the flanks and abdomen and fluids were kept up freely in an effort to encourage elimination from skin and kidneys. The vomiting was promptly checked and did not constitute the usual severe symptom. A three-grain dose of calomel and wintergreen was given on the second day in the hospital. Digitalis in the form of the tincture in 5 minim doses was begun. The injection of antistreptococcic serum was repeated three times during the next three days in doses of 10 cc., 20 cc., and 20 cc., respectively.

The hemoglobin content of the urine varied inversely as the dosage of serum given as shown by the accompanying chart.

The icterus became most profound on the second day in the hospital and decreased gradually in about four days to a pallor from the inevitable anemia.

The temperature fluctuated between 97 and 101 for the first five days when it rose rapidly to 105, accompanied by an extensive urticaria, both the result of a serum reaction. He was given aspirin in 2½-grain doses and adrenaline chloride 1:1000 solution in four minim doses hypodermically, and after two days the urticaria subsided and after four days the temperature became normal and remained normal or subnormal until he was dismissed from the hospital.

After the administration of adrenaline there were found no malarial parasites, which is interesting since adrenaline is known to

cause parasites to show up in the blood where they could not be found before.

On admission, the patient's urine had a specific gravity of 1.025, was acid in reaction, showed albumin, a few hyaline casts, an occasional red blood cell, a few pus cells, and a small amount of amorphous debris. Ten days later the urinalysis was practically the same except for a smaller amount of albumin. Three weeks after onset, urine was negative in every respect.

On October 21, six days after the appearance of the hemoglobinuria, a blood examination showed hemoglobin 45 per cent; R B C, 1,630,000; W B C, 5850; polymorphonuclears, 70 per cent; small lymphocytes, 29 per cent; large lymphocytes, 1 per cent. No malarial parasites were found.

On November 8 blood examination showed a moderate increase in hemoglobin and red blood cells, but there was still a decided anemia.

The patient was put on a highly nutritious diet consisting chiefly of eggs, milk, liver, beef, green vegetables and cereals. The only medication prescribed after dismissal from the hospital was Fowler's solution and Bland's pills.

The spleen was definitely enlarged at onset of hemoglobinuria, increased in size during stay in hospital, then gradually decreased until it was barely palpable three weeks after onset.

No treatment was aimed directly at the nephritis, which was undoubtedly due to the irritation of the products of hemolysis of the blood.

The patient was kept at absolute rest in bed for thirty days following the appearance of the hemoglobinuria to allow for time for the regeneration of red blood cells and as prophylaxis against a possible cardiac paralysis which sometimes occurs in these cases.

*Case 2.*—B. S., white, American school girl, age 15, well developed, well nourished, with a history of chills and fever over a period of several weeks, was seen for the first time at 8:30 a. m. on October 10, 1929. The patient had begun vomiting at 5 a. m. the same morning and after the first few minutes began to vomit considerable blood. She had passed also rather large amounts of blood in a few watery stools.

During the past few weeks her parents had administered small doses of quinine at irregular intervals. A blood smear revealed numerous parasites of the Estivo-autumnal type. At about 8 o'clock patient had voided six ounces of urine showing a definite hemoglobinuria. The skin and sclerae exhibited the lemon yellow of hemoglobinuric fever.



The temperature was 100°, pulse 108, respiration 24.

The patient was given  $\frac{1}{2}$  grain of morphine hypodermically, quinine dihydrochloride grains 15 $\frac{1}{2}$  intramuscularly at once. She was given iced citrocarbonate solution in small amounts every few minutes. The vomiting, which had persisted for four hours, quickly subsided and the patient was able to retain fluids and medicine by mouth. She was then given three grains of calomel and wintergreen; 20 cc. of antistreptococcic serum was administered subcutaneously. She was surrounded by hot water bottles, turpentine stupes to the abdomen and flanks and fluids were forced throughout the day.

After four hours the patient's urine was clear, the stools contained no blood, the vomiting had subsided and the patient was fairly comfortable. On the second day, malarial parasites were again demonstrated in the blood, and quinine therapy was instituted as for an ordinary case of malarial fever, a careful check being made of urine and stools for the appearance of hemoglobin and blood. Further antistreptococcic serum was unnecessary.

Iprat in two-grain doses was given to counteract the unpleasant reaction to the large doses of quinine. Hart's elixir was given at four-hour intervals after the second day.

The temperature varied between 99 and 101 for three days when it returned to normal. The patient was kept in bed for three weeks, put upon a highly nourishing diet, and codliver oil and made an uneventful recovery.

Case 3.—Mrs. M. L., white, American housewife, age 40, was first seen on September 17, 1929. Patient stated that she had had chills followed by fever at short intervals for about thirty days. She had had no treatment except occasional doses of calomel and salts. When seen she had just recovered from a severe chill and temperature was 104. A blood smear revealed numerous malarial parasites. Quinine sulphate in 10-grain doses three times a day was prescribed and three grains of calomel was given. The next day patient's temperature was normal and she felt much better. On September 19, three days from first visit, patient became nauseated, vomited, and passed a small amount of very black urine. This urine, of course, when held to the light proved to be of a dark red color, described by many as Port wine color. This patient vomited for eight hours, became profoundly jaundiced, and was critically ill.

The same treatment for the vomiting and

elimination was given as described in the other cases.

The patient was given three injections of 20 cc. antistreptococcic serum at 12-hour intervals, with a prompt diminution in the hemoglobin content of the urine after the first, and its disappearance after the second dose. The third dose was given as a prophylactic measure against further hemolysis.

Quinine therapy was discontinued upon appearance of the hemoglobinuria. On the third day a blood smear revealed no parasites but did exhibit a marked variation in the size and shape of the red blood cells. Quinine was discontinued throughout the course of the illness. Subsequent blood examinations failed to exhibit malarial parasites. This patient also developed an urticaria some days after the administration of the serum, for which ephedrine capsules were given. She was kept at absolute rest for thirty days following onset and then was allowed to get about gradually. After a week the pulse was found to be rapid and irregular and the patient complained of slight dyspnoea and pains about the heart. She was promptly put back to bed for another week when these symptoms cleared up.

The patient was not in very good health at the onset of her illness and her recovery would of necessity be much slower.

*Summary:* It would seem that the chief points in the treatment of black water fever are absolute rest in bed, early and thorough alkalization, an abundance of fluids, by rectum and subcutaneously if necessary, external heat, counter-irritation to increase elimination by skin and kidneys, an initial purge of calomel and a saline, and prompt administration of polyvalent antistreptococcic serum subcutaneously to arrest the extensive hemolysis which is the predominant symptom of the disease.

Just what the exact action of this serum on the blood stream is has as yet not been determined. Suffice it to say that it arrests the hemolytic process and if administered early and in sufficient dosage is a life-saving therapeutic agent in this dreaded disease.

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## DEEP X-RAY THERAPY

### *Conclusion Derived From the Treatment of Five Hundred Cases*

E. C. THRASH, M. D.  
W. POPE BAKER, M. D.

*Atlanta*

In reporting our work we shall define dosages and their application to the type of cases treated. Probably the simplest method would be to put dosages under three classifications, lethal, para-lethal, and mild reactionary, the lethal dose being one that would kill the cells, the para-lethal one that would completely arrest or greatly inhibit mytosis, and the mild reactionary one that would stimulate mytotic and other physiological activities of the cells.

We shall deal with radiotherapy by considering its effects upon individual cells and think of what we wish to accomplish in dealing with these. The cell groups which the radio-therapist handles are those that enter into the production of neoplasms, those that develop hyper-plasias (Hodgkin's disease, enlarged thymus, lymphopathies, etc.), and those entering into the activities of inflammatory processes. The lethal and para-lethal dosages are used in neoplasms and hyper-plasias, the mild reactionary doses in inflammatory processes.

There are but few instances that the lethal dose produced by roentgen rays is of value, because this procedure should be confined to small areas where the breach is not so wide that the surrounding tissues cannot repair the disturbance with a normal scar, and radium and fulguration will often better serve this purpose. When a lethal dose from the roentgen rays is administered the destruction is often too extensive and a profound shock is produced upon normal tissues. One in destroying tissues must take into consideration that the surrounding normal cells must have sufficient vitality left and be near enough to all the destroyed area to set up a process of repair and replace the destroyed structure with a patch.

In treating large areas one should attempt

to attain to the happy medium of arresting the activities of the diseased cells and not shock the normal physiological ones that are intermingled in a fibrous tissue network, holding in the meshes of this network the parenchyma cells of the neoplasm or hyperplastic disturbance; in other words, check and arrest the growth of the parenchyma cells and leave the fibrous tissue stroma in normal condition for the purpose of encapsulating the pathological cells whose growth has been arrested and fill the vacancies caused by the absence of these cells by fibrogenesis. One's purpose should be only to destroy the parenchyma of the tumor, leaving the frame-work to convert the malignancy into a fibrotic mass. A dose sufficient to severely shock the normal physiological cell content (fibrous tissue cells) so that it could not react in a reparatory way sufficiently to establish a connective tissue frame-work to take the place of the pre-existing pathological structures would be pernicious.

We have concluded from our experience that lethal dosages or even the repeated bombardments of the tissues with para-lethal ones in the treatment of large malignancies do harm and hasten the death of the patient, while para-lethal dosages just sufficient to arrest the growth with no further treatment until there is evidence of the tumor making further progress is the optimum measure and will usually give patients several extra years to live. The condemnation of x-ray therapy has resulted almost entirely from over-treatment. The patient feels that in order to get well his tumor must be removed and the doctor himself is too enthusiastic in an effort to treat the patient until the tumor disappears. What should be desired is for the tumor to become hard and nodular with firm shrinkage. An arrest can often be brought about without even perceptively diminishing the size of the tumor. This precaution should be borne in mind as well in treating metastasis as in treating the parent tumor. Heavy treatments for metastasis will injure the frame-work of the structures in which the neoplastic cells have been planted, leaving these tissues less resistant and inviting greater extension of the metastasis.

In taking up the mild reactionary dosages of radio-therapy we will state primarily that the surface in this field has barely been scratched. It is our opinion that there is more to be accomplished in stimulative x-ray therapy than in the form which inhibits and destroys cell growth. There is only one step from ultra-violet rays to the wave lengths which produce x-rays and their therapeutic effects are similar. The wave lengths that are just a little shorter than ultra-violet and which we can get only with the x-ray tube have wonderful therapeutic possibilities. This properly controlled gives us the means of putting therapeutic rays into the tissues instead of upon them, not only stimulating cell activities, but bringing about metabolic changes that are beneficial to the general economy.

Only a brief summary of the five hundred cases treated can be made. In this list are included all forms of neoplasms in all parts of the body, and many other pathological conditions including Hodgkin's disease, leukemia, thymus enlargement, cystitis, and thyroid dyscrasias; acne, eczema, epidermophytosis, lupus, ringworm, hay fever, boils, carbuncles, sycosis, and many other skin lesions, bacterial endocarditis, haemorrhagic endometritis, tuberculosis of the larynx, tuberculous glands, sciatica, neuritis, tuberculous peritonitis, Reynaud's disease, various chronic infections, bronchial asthma, and bronchiectasis.

Except for melonotic sarcomas, breast cancers have been the most discouraging, although this type of tumor treated under proper conditions and properly selected gives in many cases gratifying results. Most breast cancers, however, are primarily surgical, but x-ray treatment should always be considered and in most cases should be associated with surgical measures. The treatment of uterine cancers has in many instances been gratifying. Lives are practically always prolonged and in some cases cures have been made. We have some breast cancers that have been converted into endurated fibrous masses and the tumors have been in a state of apparent arrest for four and five years.

The treatment of abdominal cancers has been quite encouraging. Roentgen ray treatment has a tendency to arrest cancerous proc-

esses of abdominal viscera more easily than of many other of the cancers which we have handled. We have cancers of the abdominal viscera that have remained in a state of arrest for several years. One has shown no evidence of activity in five years. We attribute this success to the fact that we do not over-treat. As long as the tumor is apparently quiescent we do not give further treatment. We have adopted the policy not to attempt to remove tumors with x-ray treatment, but simply to arrest their growth.

Superficial cancers, especially of the skin, have responded to treatment remarkably well. Many of the smaller ones no doubt could have been handled equally well with radium, but one not familiar with radium and familiar with the x-ray should resort to the latter method. Infiltration of skin cancers is often beyond the reach of radium rays since the ramifications are in directions not known and both these stray cells and early metastasis can be removed with roentgen therapy.

We find the treatment of hypernephromas discouraging because they are rarely discovered until it is too late for any measures to be of value, and then, too, they metastasize early.

We have treated quite an array of post-operative brain tumors for Dr. Chas. E. Dowman; in fact, the moving of our deep therapy outfit from our office into the Piedmont Sanitarium was due largely to the reason that we would be able to handle his cases more satisfactorily since he does the most of his operating at this institution. The advantage in treating these tumors by deep therapy instead of with an apparatus of only 10 to 12-inch spark gap is that one can get a maximum amount of radio energy to the tumor cells with minimum amount of injury to the intervening structures. We have been able to handle most of his cases without permanently destroying the hair.

From our viewpoint, in the main these tumors have responded well to treatment. We have only treated this type of cases when Dr. Dowman would advise such procedure. We quote herewith a communication from him upon this subject:

"My conception of the problem of roent-



gen-ray treatment of intracranial tumors is summarized as follows:

"1. Pituitary tumors: In those tumors of the pituitary gland in which the tumor is a hyperplasia the roentgen-ray has a distinct value. Should the eye examination show a definite primary optic atrophy it is better to remove the bulk of the tumor by operation. In the absence of primary optic atrophy, however, even though the visual fields be already more or less affected, one or two series of roentgen-ray treatments should first be given. Occasionally the visual acuity falls off very definitely soon after such treatments, due to edema of the gland. After the edema subsides the vision should return and even be better, provided the case be one of glandular hyperplasia. Where efficacious the roentgen-ray treatments not infrequently cause a widening of the visual fields as well as a certain degree of subsidence of the glandular hyperactivity. The pituitary headaches are benefited. If, on the other hand, there are no definite evidences of improvement after the treatments operation is advisable. Under such circumstances one finds at operation a cyst of the gland or a suprasellar lesion. In chiasmal lesions in which the roentgen-ray examination discloses a suprasellar shadow I do not consider roentgen-rays indicated. Such cases are usually craniopharyngeal cysts and theoretically should not be benefited by such treatments.

"2. Tumors arising from the meninges: The so-called meningiomas are composed of cells of a highly differentiated type and do not respond well to roentgen therapy.

"3. Acoustic nerve tumors: As in meningiomas the roentgen-ray is probably of no benefit in these. This type can usually be removed intracapsularly and should be operated rather than treated with roentgen-ray.

"4. Infiltrating tumors of the cerebrum and cerebellum: Most of these belong to the so-called glioma group. Operation is always indicated in the hope that they may be either partially or totally removed. Unfortunately, it is seldom that this can be done. It is my plan to have these cases given at least two series of roentgen-ray treatments at intervals of six weeks. Since there are many different types of gliomata varying from those of childhood composed of poorly differentiated embryonic-like cells, namely, the medulloblastomas, to gliomas composed of highly differentiated cells as the astrocytomas and the oligodendrogliomas, the results of roentgen radiation will naturally vary considerably according to the predominating types of cells. In general, the more poorly differentiated the cells are from the embryonic type, the more favorable is the response to roent-

gen treatment. The medulloblastomas as a rule respond well. In this connection it should be emphasized that patients suffering from medulloblastomas should have prophylactic roentgen treatments along the spine in order to destroy such cells as might have been broken off from the surface of the tumor and found lodgment in the spinal canal. Unless such prophylactic treatments be given the patient may eventually develop cord tumor even though the primary tumor be completely cured.

"The spongioblastoma multiforme is also composed of poorly differentiated cells. The roentgen-ray seems to have no beneficial effect upon these. Such tumors are perhaps the most malignant of all tumors of the brain. As far as I know there has never been a case of spongioblastoma multiforme cured with either operation or roentgen-rays, or a combination of both.

"Gliomas composed of highly differentiated cells, namely, the astrocytomas and the oligodendrogliomas, are not benefited materially by roentgen rays. I say this with hesitation as I have had cases in which recurrence after partial removal did not seem to occur until many years afterward. This might indicate that the roentgen-ray retarded the recurrence or growth of the tumor.

"5. Tumors of vascular origin: In every large series of cases of intracranial tumor there occur a few in which the tumors seem to have developed from blood vessel cells rather than from the glia. These are probably rightfully spoken of as 'sarcomas of vascular origin.' They vary in malignancy. Those in which the microscope reveals a high degree of malignancy are probably not materially benefited by roentgen-ray. These include the so-called peritheliomas. On the other hand, these vascular tumors of only a relative degree of malignancy are probably benefited by radiation.

"6. Metastatic carcinoma: As a rule such tumors are multiple and are incurable by either operation or roentgen treatment.

"To summarize, our knowledge concerning roentgen-rays in the treatment of intracranial tumors is still too meager to permit of dogmatic statements. My impression is that the only intracranial tumors which may be cured with the roentgen-ray are the pituitary hyperplasias and the medulloblastomas. The low-grade malignant sarcomas of vascular origin may be cured by such treatments. With the exception of the pituitary hyperplasias I believe that all intracranial tumors should be investigated through operation and removed if possible, either totally or partially. If removal is impossible a biopsy specimen should be taken. The prognosis



depends largely upon the types with which we are dealing. Without a microscopic study it is difficult to predict what the outcome of each case will be. I follow operations with roentgen-ray treatment in all cases of infiltrating tumors, metastatic carcinomas, and the sarcomas of vascular origin."

In the treatment of cancers, we wish to say that those that are discovered early respond well to x-ray treatment. It is our opinion radium is often given preference in such treatment when roentgen rays properly administered would serve a better purpose.

We consider thyroid dyscrasias surgical diseases. The rays will reduce the toxicosis, however, and will prepare the patient so that he will become a better surgical risk. In many of the milder types, especially where an operation is refused, x-rays will abate the toxicosis and often put the patient in good physical condition. There are some cases of post-operative thyro-toxicosis, especially in sub-sternal goitres, where x-ray treatment should be advised.

X-ray treatment is about our only means of benefiting Hodgkin's disease and leukemia. The results of the treatment of benign tumors have been satisfactory. They promptly reduce in size and in some instances will disappear and they can practically always be arrested.

Skin lesions respond especially well to x-ray treatment. In sycosis our results have been 100 per cent. All chronic scaly eruptions respond well to x-ray therapy. Epidermophytosis, especially on the toes and around the anus, which yields so poorly to ordinary treatment, responds promptly to this means of therapy.

Chronic neuritis in most cases improves. We have come to the conclusion that this is the best means of treating sciatica.

Simple bronchial asthma has yielded more or less in every patient and in many instances our records show up to the present complete arrest. Recently we have been treating stubborn types of hay fever, which have responded well. Our work in this has been too recent to show how permanent these results will be.

In conclusion we will say that x-ray therapy is by no means confined to malignancies, and since all methods of treatment of malignancies

are more or less discouraging, our present opinion is, while much good is accomplished from the treatment of these disturbances, the greatest value of x-ray therapy is not within this field, but within the domain of stubborn pathological conditions where results have not been good in the utilization of other measures.

Our therapeutic work has been done with a water cooled type machine with maximum voltage of 200 K. V., 15 to 30 milleamperes and a distance ranging from 30 to 50 centimeters, combined aluminum and copper filtration and dosage ranging from 200 to 600 milleampere minutes, depending upon what we wish to accomplish.

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### PULMONARY SYPHILIS\*

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C. H. FERGUSON, M. D.

*Thomasville*

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Syphilis is one of the oldest diseases that has assailed man and is now prevalent over the whole world. It is essentially a disease of man, but may be transmitted to the anthropoid ape. Both sexes are equally susceptible to the infection, and so wide spread is the disease that 20 per cent of hospital cases and 10 per cent of the entire population shows evidence of its infection. The infection is contracted by inoculation with the specific organism, acquired syphilis, or the parents may transmit it to the offspring, congenital syphilis. A natural immunity is exceedingly rare, although its virulence has been greatly modified during the past few decades and the symptomatology has lost much of its violence, so that in many instances the infection can only be determined by the specific serum reaction.

Pulmonary syphilis is the specific phase of the disease that we wish to discuss tonight. There are two forms of lung syphilis. The white pneumonia of the new-born as described by Virchow in 1858, which is probably only of pathologic interest, and the acquired type of lung syphilis. The acquired type is the one we will study in this paper. In reviewing the literature on syphilis, one

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\*Read before a staff meeting of the John D. Archbold Memorial Hospital, Thomasville, Ga.

notes that pulmonary syphilis is a very rare disease, although it is probable that it is not diagnosed as frequently as it exists and due to the fact that it so closely resembles tuberculosis of the lungs, and the differentiation is difficult. Statistical references illustrative of the rarity of pulmonary syphilis are given. Osler found only four cases of lung syphilis in 2800 autopsies. Backok reports only two cases in 6000 Chicago autopsies, and West two cases in 6000 autopsies in Copenhagen. Carrera working in Warthins laboratory found in the study of 250 cases of known syphilitic 7.8 per cent with lung syphilis. Howard states that the ratio of lung syphilis to visceral syphilis was one to twenty. At the Jefferson Chest Hospital in the careful examination of 1200 supposedly tuberculous patients for mistaken diagnosis, 72 were persons nontuberculous; four were found to be pulmonary syphilis.

The general practitioner, who represents the frontier in medicine, is the one who puzzles over the indefinite and obscure symptomatology, and who makes his diagnosis by evaluating it and calling to his aid the findings of the laboratory and the x-ray. Howard, of the University of Iowa, states the following findings are necessary for diagnosis of lung syphilis:

- 1—A constantly negative sputum for tubercle bacilli.

- 2—The presence of the stigmata of syphilitic infection.

- 3—A markedly strong Wassermann reaction.

- 4—A therapeutic test by anti-leptic treatment.

He also calls attention to the fact that there is often absence of grave symptoms proportionate to the physical findings in the lungs.

After the discovery by Koch of the tubercle bacilli it seemed to hold the center of the stage and around it were arrayed all nontuberculous lung conditions as well as the tuberculous. It was not until 1918 when Warthin published his monographs elucidating the distinctive features of the pathologic histology of syphilitic infection that the profession began to recognize again that certain forms of lung diseases might be due to syph-

ilitic infection. Warthin summarized his findings as "The essential tissue lesion of either late or latent syphilis is an irritative or inflammatory process, usually mild in degree, with slight tissue proliferations, eventually fibrous, and atrophy or degeneration of the parenchyma. These mild inflammatory reactions are due to the localizations in the tissues of relatively avirulent spirochetes. The pathologic diagnosis of syphilis is essentially microscopic." By applying the therapeutic test in many obscure cases the results have confirmed the diagnosis of syphilis of the lungs.

Krashner in 1925 in reviewing pulmonary syphilis states the average age of patients suffering from pulmonary syphilis was 36. The average time elapsing between the pulmonary disease and the initial infection is eleven years. The earliest cases occurred three months after infection.

Delayed resolutions of the lungs following pneumonia should excite suspicion that we might be dealing with syphilitic infection. Syphilis should be considered as a cause of unresolved pneumonia, and a factor in the production of certain other post-pneumonic complications. J. B. Youman studied carefully the records of thirty patients with post-pneumonic complications, unresolved pneumonia, fibroid pneumonia, pulmonary abscess, and bronchiectasis. In ten instances the patients are living and in twenty the findings were confirmed at autopsy. Of the ten living, six showed definite evidence of syphilis, and two were probably syphilitic. Of the twenty cases of autopsy six showed the presence of syphilis and in four syphilis was questionable. Thus of a total of thirty cases of post-pneumonic complications, at least 40 per cent occurred in association with syphilis.

Pre-existing syphilis is apparently an important and frequent cause of non-resolution of pneumonic complications, and as such its importance has been insufficiently appraised. The presence or absence of syphilitic infection should be determined in all cases of delayed resolution. The recognition of such possibilities should stimulate further investigation in the problem.

We are aware that lobar pneumonia is a

self-limited disease; that resolution of the lungs takes place under sero-cellular processes which are not thoroughly understood, and that these processes may be delayed and then accomplish the resolution of the lung. But when we apply the therapeutic test and the entire condition of the patient shows marked general improvement as well as the lung condition, we are compelled to accept the specific therapy test as a positive factor in the improvement of the patient.

A case report:—The patient entered the John D. Archbold Memorial hospital with a diagnosis of empyema. The patient was a negro man, age 28 years, fairly well nourished, right side partially paralyzed; had a severe cough and was expectorating large amounts of thick, yellow sputum. The temperature was 100, pulse 98, blood pressure 115 systolic, 80 diastolic. The right lung was clear; the entire left lung showed involvement, beginning with dullness and rales in the apex and increasing in intensity downward to the fourth and fifth ribs, where the dullness became absolute.

Laboratory findings: The Kahn and Wassermann reactions were both strongly positive; blood chemistry findings normal, leucocytes 11,400, erythrocytes 4,290,000, 70 per cent polymorphonuclears; no malaria, and hemoglobin 75 per cent. The sputum specimens were thick greenish-yellow, showed considerable fibrous tissue, and many cocci, but no tubercle bacilli. Sputum cultures were negative for fungi.

The x-ray findings as reported by Dr. James F. Pittman:—"A generalized thickening of entire lung and pleura on left side, the diaphragm is obscure, but density is not sufficient to suggest fluid, the appearance is not typical of tuberculosis. In view of the strongly positive Kahn and Wassermann, I believe the lung pathology is leptic in origin, with secondary non-tuberculous infection. The heart, aorta and right side of the diaphragm are normal."

Past History:—The patient was taken ill with a severe cold April 15, 1929. Three weeks after the onset of the cold he developed pneumonia in both lungs. He was ex-

tremely ill and was sent to a hospital in Detroit, where he was in a critical condition for three weeks. The temperature ranged around 105 degrees; pain in left lung was very severe, and it was necessary to immobilize the chest with adhesive plaster for relief. In about three weeks the fever subsided, with improvement to some extent—the right lung clearing up. The patient did not improve as he should and examination showed that the left lung had not undergone resolution. Several exploratory punctures were made for fluid, but none was found. Three months after the illness paralysis developed on the right side which was complete. After five or six days the patient was able to move his arm and leg a little and in a short time he was able to get up with the aid of an orderly. The patient was given three doses of arsphenamine intravenously, and a liquid medicine for which he took for several weeks.

The patient had had a chancre in 1926, but he noticed no skin eruption. He developed hemiplegia at twenty-eight, three years after the specific lesion. This patient presented every requirement for a clear diagnosis of pulmonary syphilis. He had the exciting cause, the pneumonia with the delayed resolution, which is now clearing up under anti-leptic treatment. The specific serum reaction is positive, the sputum examinations for tubercle bacilli have been constantly negative.

Pulmonary syphilis is accounted a rare disease, but when we recognize the possibilities of a stubborn lung condition being syphilis, and call to our aid the laboratory and x-ray findings, we will be more frequently forced to the diagnosis of lung syphilis. Radiographically, there seems to be no characteristic picture of lung syphilis, nor can we expect that for so varied a picture as syphilis offers.

Diagnosis is of tremendous importance for it determines the treatment, and the welfare of the patient physically, economically, and socially. I wish to here call the attention of the profession to the possibilities of diagnosis and treatment when all the facts in these cases of obscure lung conditions are carefully noted.



**THE JOURNAL**

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

FEBRUARY, 1936

**AMEBIC ABSCESS OF THE LIVER\***

Liver abscess is frequently seen in the hospitals and clinics of Georgia and not infrequently the cause is found to be infection with *Entameba histolytica*. During 1928 five such cases occurred in Atlanta and it is probable that these constitute a small percentage of the total number occurring in the State. Available information would indicate that approximately 20 per cent of cases of amebic dysentery are complicated by liver abscess. "In 3,680 dysentery autopsies made in various tropical countries, and collated by Woodward, 779, (21 per cent) revealed abscess of the liver. In the north temperate zone, due to the difference in climatic conditions and habits of living of the people, it is probable that the incidence of liver abscess in amebic infection is much smaller. Liver abscess is said to occur most often in very mild or latent cases of intestinal amebiasis. The condition is rare in children and is ten times more frequent in men than in women.

A knowledge of the pathology of intestinal amebiasis is necessary for a clear understanding of the formation of a liver abscess. According to Manson-Bahr, "the amebae enter the intestinal glands, or the interstitial tissue surrounding these, and at first come to rest temporarily at the bases of the glands, or in the interstitial tissue above the muscularis mucosa. A secondary round cell of infiltration takes place later, and the small terminals of the arterial system and the little venous radicals, with the intervening capillary network very early become congested and thrombosed, in the region of the original invasion. The tissue affected breaks down, and a minute abscess begins to point into

the lumen of the gut." "The dislodgment of amebae-containing material from these intestinal lesions and the plugging of the portal capillaries by such emboli give us the starting point of a liver abscess." Regarding the pathology of amebic abscess of the liver "it may be inferred from the symptoms that in the early stages of suppurative hepatitis there is general congestion and enlargement of the liver; in some instances this condition may be more or less confined to one lobe or even part of one lobe. Later, as we know more especially from observations in cases that have died from the attendant dysentery one or more grayish, ill defined, anemic, circular patches, one-half to one inch in diameter, in which the lobular structure of the gland cannot be made out, are formed. These gray spots are very evident on section of the organ. A drop or two of a reddish, gummy pus may be expressed from the necrotic patches. Still later, the centers of the patches liquefy, and distinct but ragged abscess cavities are formed. An abscess thus commenced extends partly by molecular breaking down; partly by more massive necrosis of its walls; partly by the formation of additional foci of softening in the neighborhood and subsequent breaking down of the intervening septa. The walls of such an abscess have a ragged and rotten appearance." According to Stitt the situation of amebic abscess of the liver is 75 per cent for the right lobe, 10 per cent for the left lobe, 4 per cent for the Lobus Spigelii, and in 10 per cent in both right and left lobes. Single abscess occurs in 60 per cent of cases and multiple abscesses in 27 per cent. Liver abscess is usually situated on the upper convex surface of the liver, and for this reason the enlargement is usually upward under the diaphragm before it is evident below the coastal margin.

The onset is usually insidious, occurring during convalescence from an attack of dysentery, with an evening rise of temperature, sweats, loss of weight, a gradually developing sense of weight or pressure in the right hypochondrium with tenderness over the hepatic area, leucocytosis and rarely jaundice. Of great importance in the diagnosis is the discovery of the cysts of *Entameba histolytica*

\*Manson's Tropical Diseases. Diagnostics and Treatment of Tropical Diseases. Stitt.

in the stool. They are found in about 27 per cent of cases. The amelioration of symptoms following the hypodermic injection of emetine for three or four days is of diagnostic importance also. Emetine is of most value in metastatic amebic lesions and should be used for several days before these cases are operated on. The general treatment of these cases is largely surgical and is omitted from this discussion.

M. S. D.

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## HEALTH EDUCATION WEEK

May 5-10, 1930  
(First Week in May)

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### *Suggestions for County Societies*

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#### *Purpose of Health Education Week*

The purpose of Health Education Week is to teach the public the simple elementary facts about health through practical demonstrations (health examinations) and public lectures.

#### *Method of Procedure*

The President of our Association has appointed local committees in all those counties where the county societies have expressed a desire to co-operate in this work. All details and arrangements will be left entirely in the hands of the local committees. Local committees should be completed as soon as possible by the addition of such leading men and women as each local committee thinks advisable.

#### *Clinics for Health Examinations*

Each local committee will decide whether or not clinics will be held in connection with the public lectures on health education. Where clinics are to be held the local committee will select one or more consultants to assist the members of the county society in the examinations and also to give a public lecture in addition to the lectures by members of the local society.

It is suggested that the members of the local societies be divided into groups of three to five for the purpose of making the health examinations and that each doctor be assigned a particular part of each examination; for example, one may examine the head and neck, another the chest and abdomen, an-

other the reflexes, etc. Each local committee should decide how many days and what hours are to be devoted to the examinations. Each committee should also decide whom to admit for examination. Each person examined should be given a report on a blank furnished by the Association.

Only diagnostic work will be done and all those examined and found to have defects or diseases will be referred to their respective family physicians for treatment.

#### *Lectures*

The local committees will decide on what subjects are to be covered in the lectures to the public and assign subjects to members of the local societies. They will also decide on the subjects of the consultants who will give their lectures along with the members of the local societies.

#### *Publicity*

The local committees will prepare and issue from time to time publicity material for the local papers, giving all pertinent facts pertaining to Health Education Week sponsored by the Medical Association of Georgia

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## THE EXTENT OF ILLNESS\*

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### *Abstracts*

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#### *Illness*

The people of the United States, on the average, suffer from one to two disabling illnesses per year, males generally having about one case per year and females closer to two cases. School children seem to have an average of over two cases each per school year. For respiratory illnesses alone, including those which do not disable, there is an annual rate of illness of two to three cases per year. Seven to nine days per year, on an average, are lost by male workers and approximately eight to twelve days per year by females. Children lose from their classes during a school year an average of seven or more days per child.

The diseases which occur in half or more of the ten lists (compiled by the committee) are:

Colds and bronchial conditions.

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\*The Committee on the Cost of Medical Care. Publication Number 2, Washington, D. C.

Influenza and grippe.

Digestive diseases and disorders.

Diseases of the pharynx, tonsils and larynx.

Non-venereal diseases of the genito-urinary system and annexa.

Diseases of the skin and cellular tissue.

"Headache."

"Rheumatism."

Colds and bronchial conditions, and influenza and grippe, which occur in every list and frequently as the two leading groups, are obviously the most serious causes of disability from the standpoint both of frequency and of days lost. Diseases of the pharynx, tonsils, and larynx—including adenoids, tonsillitis, sore throat, and croup—are also of considerable importance. On the basis of both number of cases and total time lost, digestive diseases and disorders loom large. The non-venereal diseases of the genito-urinary system and annexa receive prominence in the list largely because of the frequency of cases of dysmenorrhea among women and girls. It may be rather surprising, perhaps, to many people to learn that diseases of the skin, which include "boils", scabies, pediculosis, and other skin affections, are as important both in number of cases and in amount of disability caused as is here revealed. While "headache", which is really a symptom and not a disease, may not incapacitate, it does none the less cause suffering and inefficiency and may indicate other conditions of a serious nature. "Rheumatism" was included among the first ten causes in most of the surveys of adults.

One per cent of the people on any average day are being treated for a venereal disease. Tuberculosis, drug addiction, and diabetes together affect on a single day over 800,000 persons. Malaria, although preventable, is still widely prevalent in sections of the South, and smallpox, also preventable, causes over 30,000 cases a year. Mental disease now is confining more patients to hospitals, at any one time, than all other diseases combined. It probably afflicts over 400,000. Of the feeble-minded and epileptics, 52,000 are in state institutions. Hundreds of thousands of people, no one knows how many, suffer from psychoneuroses.

### *Defects and Non-Disabling Diseases*

The conclusion drawn from the study is that there are, in the higher economic groups, considerable percentages of men in the prime of life and actively engaged in their daily labors, who have important, and perhaps dangerous, disorders of the heart, blood vessels, the nervous system, and the urinary system.

Of the children embraced in six surveys, from 65 to 95 per cent have one or more defects. A recent study has shown that children who have, or have had, diseased or enlarged tonsils suffer much more frequently from rheumatism, lumbago, neuralgia, neuritis, heart diseases, and ear diseases than those with normal tonsils. The other defects of childhood certainly also forecast, although to exactly what extent no one yet knows, more serious defects in adult life.

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## MEMBERSHIP

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The Association had to February 1, 1930, the largest number of paid members to that date in its history. The paid members to February 1, 1929, exceeded those of any previous year. The roster of members has gradually increased from year to year. With the assistance of our members, we hope not only to maintain our present roster of members, but to increase it and build a profitable advertising account whereby the usefulness of the Association may be greatly increased.

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## RADIO WAVES

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### *Third Edition*

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"Organized medicine as represented by the Medical Association of Georgia combines the best thought and finest principles of the foremost minds of the profession, developed for the greatest benefit to its entire membership."  
—Dancy.

"Dream your dream of what might be, if we would do our best, then follow the gleam."  
—Moore.

"Study, attend your Medical Association, and you will be greatly benefited."  
—Coker.



"Deeds, not words, tell how we live."—*Clark.*

"Stay in the middle of the road and keep going."—*Bunce.*

"What we need most is not to realize the ideal, but to idealize the real."—*Myers.*

"Fix your ideal on health, happiness, and usefulness."—*Redfearn.*

"Love the truth and seek to find the truth."—*Wise.*

"Act today! Trust little to the morrow."—*Roberts.*

"Organized medicine should map its own plans for charity service instead of permitting the organized public to use the former's constituents as tools."—*Thrash.*

"There was never a meeting of the Medical Association of Georgia that did not do a great deal of good to each member attending."—*Head.*

"Self-respect, alone, should cause every physician to be 100 per cent loyal in the forward march of his profession."—*McCord.*

"Do we realize the enormous measure of opportunity in the physician's life?"—*Fullilove.*

"In medicine, there should be an adequate balance between specialized knowledge and general information."—*Ayers.*

"The practice of medicine has a scientific side and a business side. Do not neglect either."—*Lewis.*

"Reach into those things which are before. Press towards the prize of thy high calling."—*Coleman.*

"Have every child in your practice as near normal physically as possible when it undertakes school work."—*Wall.*

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### WANTED BEFORE AUGUSTA SESSION

1. What secretary of a county society has had the longest consecutive term of service?
2. Who is the oldest living member of the Association?
3. Who has been a member of the Association for the longest period of time?
4. Who now in active practice has practiced medicine in Georgia for the greatest number of years?

### AUGUSTA SESSION May 13, 14, 15, 16, 1930

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#### RICHMOND COUNTY MEDICAL SOCIETY COMMITTEES

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##### *General Committee on Arrangements*

Dr. William A. Mulherin, Chairman  
Dr. George A. Traylor  
Dr. Guy T. Bernard  
Dr. Theodore E. Oertel  
Dr. William R. Houston  
Dr. Virgil P. Sydenstricker

##### *Entertainment*

Dr. William J. Cranston, Chairman  
Dr. John H. Sherman  
Dr. W. Whatley Battey  
Dr. Hugh N. Page  
Dr. Carlisle S. Lentz

##### *Reception and Hotels*

Dr. Robert L. Rhodes, Chairman  
Dr. James M. Hull  
Dr. Samuel J. Lewis  
Dr. William C. Kellogg  
Dr. G. Lombard Kelly

##### *Transportation*

Dr. Ralph H. Chaney, Chairman  
Dr. Joseph D. Gray  
Dr. David M. Silver  
Dr. Joseph Akerman  
Dr. Irvine Phinzy

##### *Refreshments*

Dr. King W. Milligan, Chairman  
Dr. Henry M. Michel  
Dr. Peter B. Wright  
Dr. Lysander P. Holmes  
Dr. Charles D. Ward

##### *Banquet*

Dr. Eugene E. Murphey, Chairman  
Dr. William H. Goodrich  
Dr. Charles W. Crane  
Dr. Asbury Hull

##### *Golf*

Dr. F. Lansing Lee, Chairman

##### *Trap Shooting*

Mr. W. H. Lanier, Chairman  
Mr. J. C. Fargo  
Mr. Chas. M. Carroll

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### EX-PRESIDENTS

#### *Important Notice*

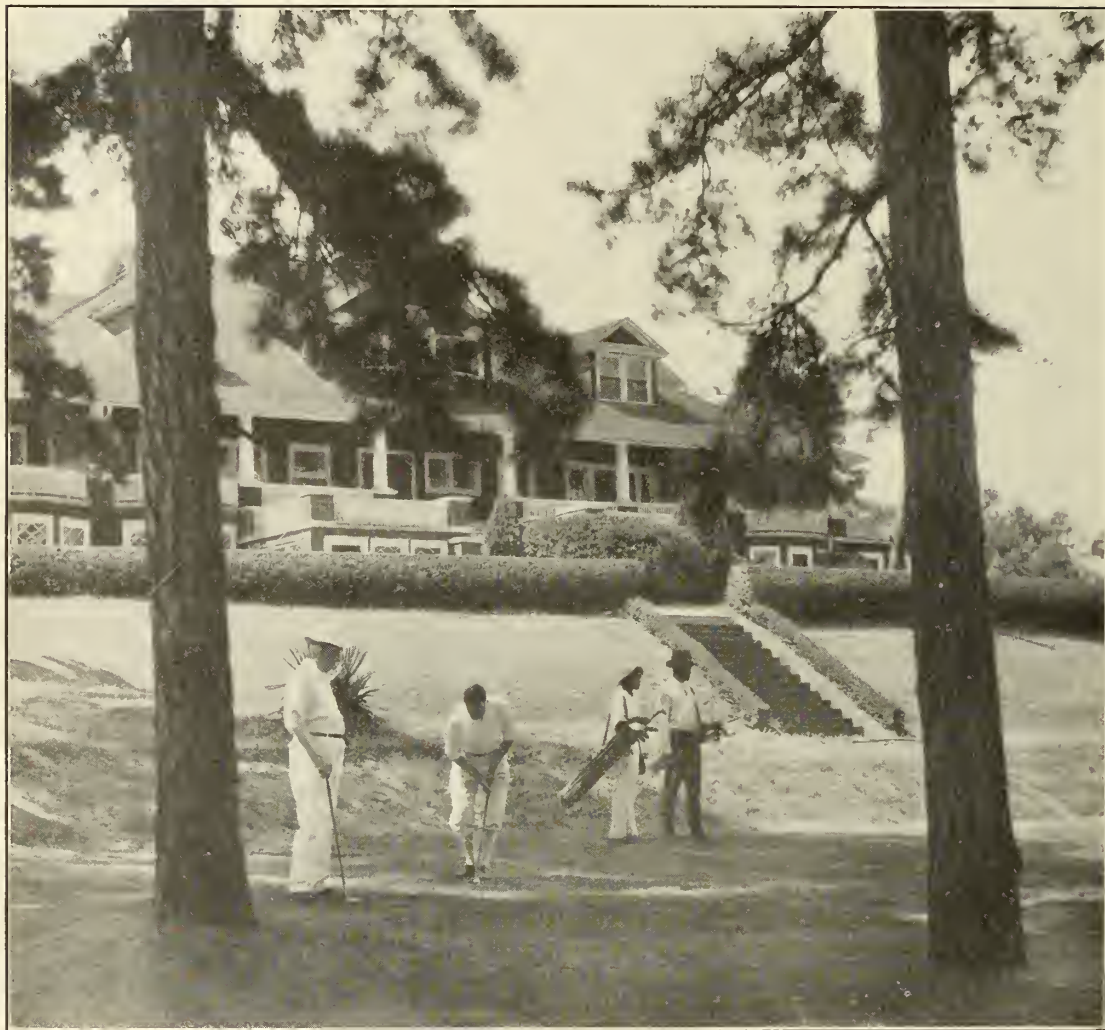
A group picture of all Ex-Presidents of the Association will be taken at Augusta on Thursday, May 15, 1930, during the annual session of the Medical Association of Georgia.

## AUGUSTA

EIGHTY-FIRST ANNUAL SESSION

MEDICAL ASSOCIATION OF GEORGIA

May 13, 14, 15, 16, 1930



Augusta Country Club

## PUBLIC BUILDINGS

Augusta's public buildings represent an investment of millions of dollars and are a source of pride to all Augustans. The following public buildings are worthy of note: Municipal Building, Y. M. C. A. Building, Y. W. C. A. Building, Federal Building, County Court House, Masonic Temple, Knights of Columbus Building, and Elks' Home.

*Hotels*

Bon Air-Vanderbilt, 400 rooms.  
 Forrest Hills-Ricker, 300 rooms.  
 Partridge Inn, 150 rooms.  
 Richmond Hotel, 300 rooms.

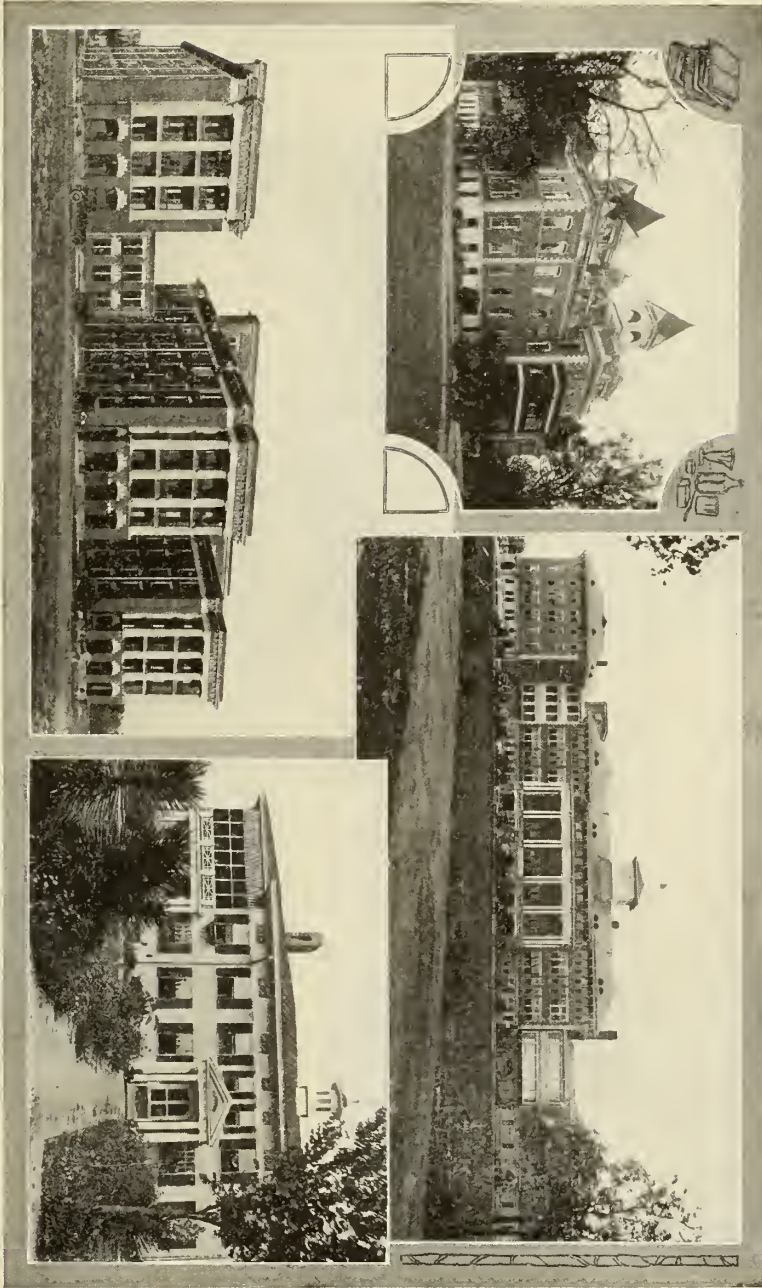
Plaza, 89 rooms.  
 Terminal, 75 rooms.  
 Genesta, 40 rooms.  
 Georgia, 42 rooms.  
 Margaret-Hamilton, 43 rooms.

## HIGHWAYS

Augusta is the hub of a system of South-eastern highways, including the Dixie Highway, Jefferson Davis Highway, Stone Mountain Highway, Woodrow Wilson Highway, Cotton Belt Highway, Woodpecker Route, Arrow Route, and Black Bear Trail.



## HOSPITAL AND MEDICAL COLLEGE OF AUGUSTA, GEORGIA



Upper left: COLLEGE—Medical Department of the University of Georgia, Augusta, Georgia. Established 1828. "Step by step she has kept fully abreast of every advance in medical science, until today she ranks with the best medical schools of the country, being second to none, and far in advance of many." Upper right: ADMINISTRATION BUILDING—From a modest beginning to national prominence. Lower left: WILHELM-FORD CHILDREN'S HOSPITAL—In the Wilhelms-Ford Children's Hospital our students have available excellent facilities for pediatric teaching. Our graduates are sought after for internships by the foremost hospitals in the United States. Full time departments of medicine, surgery and obstetrics are now maintained. Pediatrics will soon be on a full time basis. Lower right: UNIVERSITY HOSPITAL—Erected and equipped by the city of Augusta at a cost of a half million dollars. The University Hospital is conceded a high rank among the leading hospitals of the country. Here the students have a splendid opportunity to gain a wide variety of clinical experience in medicine and surgery.

## HOTELS UNSURPASSED

The Richmond Hotel, with three hundred rooms, is without question one of the best commercial hotels in the entire South. The Bon Air Vanderbilt, the Forrest Hills-Ricker, and the Partridge Inn are hotels of the utmost distinction and character. Not only are these structures of striking architectural design and beauty—they are also exceptional in the thoroughness of their appointments. The Bon Air-Vanderbilt has four hundred rooms; Forrest Hills-Rucker,

three hundred rooms, and the Partridge Inn, one hundred rooms.

## STRATEGIC LOCATION

When Augusta was founded by General James Edward Oglethorpe, it was definitely planned to be the leading city of Northeast Georgia and Southeastern South Carolina. Augusta is located on the Savannah River, 132 miles from the Atlantic Ocean. It covers an area of 9.68 square miles. The altitude ranges from 138 feet in the business district to 483 feet in the residential section.



### GOLF COURSES

Set your expectations high—look forward to some real golf—for you won't be disappointed when you try the Augusta courses!



Richmond Hotel

Whether you have difficulty in "breaking a hundred," or whether you are one of the players who "flirts with par"—you'll find golf here that suits you to a "T."

Bobby Jones has played these courses—Chick Evans, another internationally known golfer, is a frequent player. The courses



Forrest Hills-Ricker

were laid out or reconstructed by Donald Ross and the late Seth Raynor. The setting of the courses could not be surpassed. They wind their way through groves of stately pines, hanging bamboo and yellow jessamine vine which are green all the year and add charm to the courses. Dogwood and its never-to-be-forgotten blooms are found in profusion and add a touch of nature's artistry to the beautiful courses.

All three of Augusta's championship courses have a foundation of Bermuda,

which, with Kentucky Blue Grass, Red Top and Italian Rye, make ideal putting surfaces. The Augusta Country Club is a center for things social and is a splendidly equipped club. The Forrest Hills-Ricker Hotel has a rather unique arrangement — thoroughly practical and one that meets immediate favor with its guests — in a club house on the ground floor of the hotel. A large grill is convenient to the locker rooms.

### INDUSTRIES

Augusta's resources, its location for distribution and its power facilities have combined to make it one of the outstanding manufacturing cities of the Southeast. There are thirteen large textile mills in and around Augusta, producing annually more than \$25,000,000 worth of cotton goods. Augusta has the largest silk throwing mill in the South and the largest cotton waste mill in the United States. Augusta is of great importance as a cotton concentration center, being a United States designated spot market; it also has the distinction of being the



Partridge Inn

second largest inland cotton market in the United States.

Thirteen plants producing burned clay products make Augusta the largest clay products manufacturing center in the Southeast.

(Continued on Page 84)



Bon Air Vanderbilt

## GEORGIA STATE NURSES' ASSOCIATION

## Officers

*President:* Miss Lucia Masee, R. N.,  
Cuthbert, Ga.

*First Vice-President*

Miss Alice F. Stewart, R. N.,  
University Hospital, Augusta.

*Secretary*

Mrs. J. F. Hawthorne, R. N.,  
410 Arnold St., N. E., Atlanta.

*Second Vice-President*

Mrs. Mae M. Jones, R. N.,  
Georgia State Sanitarium, Milledgeville.

*Treasurer*

Miss Jane Van De Vrede, R. N.,  
131 Forrest Ave., N. E., Atlanta.

## COUNCILORS

Miss Annie Bess Feebeck, R. N.,  
Grady Memorial Hospital, Atlanta.

Miss Vera Mingledorff, R. N.,  
209½ West Duffy St., Savannah

Miss Margaret Dorn, R. N.,  
1117 Telfair St., Augusta.

Miss Hattie Wilder, R. N.,  
118 Stonewall Place, Macon.

THREE NATIONAL NURSING  
ORGANIZATIONS*Biennial Convention*

Milwaukee will welcome the convention of three National Nursing Organizations—the American Nurses Association, the National League of Nursing Education, and the National Organization for Public Health Nursing—June 9-14 next.

Milwaukee derived its name from the Indian "Mahn-a-wau-kie", meaning "good and beautiful land", and is one of our most important and interesting midwestern cities. It is said Milwaukee nurses have but one object—to entertain and make comfortable the visitors during their stay in that city.

Miss Cornelia Van Kooy is the Wisconsin state chairman for the convention, and Miss Anna Rice, of Milwaukee, is the local chairman.

All meetings will be held in the Milwaukee Auditorium, a commodious building of size sufficient to take care of the commercial exhibit as well as all sessions of the three nursing organizations, including joint meetings, conference groups, section meetings, round tables, etc. A lunch room in the building will make it possible for many of the visitors to spend the entire day in the auditorium if desired.

The Schroeder Hotel will be used by the boards and committees of the three organi-

zations, while speakers will be located at the New Pfister.

Though ample hotel room is assured, nurses are urged to make their reservations early in view of the large number of delegates and visitors who will be in attendance. The following hotels have been recommended by the Convention Bureau of the Milwaukee Association of Commerce: The Abbot Crest, Adelin, Ambassador, Antlers, Astor, Belmont, Blatz, Brown, Carlton, Colonial, Delaware, Edison, Gilpatrick, Globe, Juneau, LaSalle, Martin, Maryland, McCoy, Medford, Metropole, Miller, New Pfister, New Randolph, Plankinton, Plaza, Republican, Royal, Schroeder, Schuster's, Shorecrest, Wayland, and the Wisconsin.

*Transportation*

All roads will co-operate to transport nurses from the various parts of the country, and regional chairmen have been appointed by the national chairman of transportation, Mrs. Alma Scott, field secretary of the American Nurses Association.

Miss Jane Van De Vrede is chairman for the group of states known as the South Atlantic. These include Georgia, Florida, North and South Carolina, Virginia, and West Virginia. Miss Van De Vrede is appointing 'key' nurses, with the help of the State Association presidents, in each of these states.

Miss Margaret Dorn, 1117 Telfair Street, Augusta, is chairman for Georgia, and nurses planning to attend the biennial are urged to



send their names to Miss Dorn, who will be glad to supply information regarding transportation schedules, etc.

Nurses look forward to "the biennial" with a great deal of expectancy, and interest is particularly keen in Georgia and other Southern states this year since Georgia is naming a candidate for the presidency of the American Nurses Association — Miss Jane Van De Vrede, R. N.

One delegate is allowed for every fifty members of the State Association, and the number of delegates increases as the membership of the State Association is increased. On February 10th the Georgia State Nurses Association had 1013 paid up members. This number will undoubtedly be increased before March 1st, when the books of the A. N. A. close so far as representation at the convention is concerned. Delinquent members should at once send their dues to the alumnae and district associations. The G. S. N. A. has a goal of 1250 paid members for 1930, and the majority of this number should be secured before March 1st. Last year's peak membership was 1077.

#### *District Association Changes*

The Georgia State Nurses Association, in convention assembled, voted to change the name or number of its district organizations, where necessary, to conform to the number of the Congressional district in which the headquarters is located. This brings about the following rearrangement:

First District (formerly Fourth), headquarters Savannah. Miss Martha G. Gatzka is the president of the First District Association.

Fourth District (formerly Fifth), headquarters Columbus. Miss Eva Chalkley, president.

Fifth District (formerly First), headquarters Atlanta. Miss Lillian M. Alexander, president.

Sixth District (formerly Third), headquarters Macon. Miss Dora Kershner, president.

Tenth District (formerly Second), headquarters Augusta. Mrs. Effie Akerman, president.

The Seventh, Eighth and Ninth District

Associations were named for the congressional districts when organized, and headquarters are in Rome, Athens and Gainesville, respectively. The presidents are, respectively, Miss Shirley Hamrick, of Cedartown; Mrs. W. C. Thurmond, of Athens, and Miss Dorothy Booth, of Gainesville.

At present there are no Second and Third district associations.

#### *Executive Board of the G. S. N. A.*

The Executive Board of the Georgia State Nurses Association is composed of the officers and councillors of this organization and the presidents of districts, together with the president of the Georgia League of Nursing Education and the president of the State Organization for Public Health Nursing. The Board will hold a meeting in Atlanta, at the headquarters office February 14th.

The standing committees of the State Association are Ways and Means, Headquarters, Finance, Program, Resolutions, Credentials, Education, Public Health, Publicity, Nominations, and Arrangements. An Advisory Council is composed of the officers, standing committees, including the Red Cross Committee, district presidents, and alumnae presidents.

There is also a special committee known as the Advisory Committee, of which Mrs. Joseph Akerman, of Augusta, is the chairman.

#### *Nurses Contributed to the Program of the Regional Conference of the College of Surgeons*

Nurses took part in the open forum program of the Regional Conference of College of Surgeons at the Biltmore Hotel, January 13-14. On the afternoon of the 13th, Miss Jessie M. Candlish, R. N., Superintendent of Eggleston Memorial Hospital for Children, Atlanta, and former President of the State Board of Examiners of Nurses for Georgia, presented a paper entitled "How Can the Patient Be Assured Adequate and Efficient Nursing Care?" This was discussed by Mrs. Eva S. Tupman, Instructress, Grady Hospital, and Miss Minnie Bass, Instructress of Wesley Memorial Hospital. A general discussion followed.



## COUNTY SOCIETIES 1930 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 5, 1929.
2. Barrow County, Dr. W. L. Mathews, Winder, December 5, 1929.
3. Dougherty County, Dr. I. M. Lucas, Albany, December 28, 1929.
4. Lamar County, Dr. J. M. Rogers, Barnesville, January 6, 1930.
5. Turner County, Dr. J. H. Baxter, Ashburn, February 10, 1930.

\*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

## NEW MEMBERS FOR 1930

Avera, J. B., Brunswick.  
 Bennett, W. H., Avera.  
 Cason, W. M., Sandersville.  
 Dame, L. H., Homerville.  
 Dunn, L. B., Savannah.  
 Harbin, R. M., Jr., Rome.  
 Kracke, Roy R., Decatur.  
 Lennard, O. D., Sandersville.  
 Newsom, E. T., Union Point.  
 Sessions, J. H., Homerville.  
 Sharpe, H. C., Alston.  
 Story, F. C., Jesup.  
 Striplin, M. D., Funston.  
 Todd, L. N., Valley Station, Ky.  
 Williams, A. D., Lawrenceville.

## COUNTIES REPORTING FOR 1930

### HABERSHAM COUNTY MEDICAL SOCIETY

Habersham County Medical Society announces the following officers for 1930:

President—J. B. Jackson, Clarksville.  
 Vice-President—P. Y. Duckett, Cornelia.  
 Secretary-Treasurer—R. B. Lamb, Demorest.  
 Delegate—R. B. Lamb, Demorest.

### LOWNDES COUNTY MEDICAL SOCIETY

Lowndes County Medical Society announces the following officers for 1930:

President—G. T. Crozier, Valdosta.  
 Vice-President—E. J. Smith, Habira.  
 Secretary-Treasurer—B. G. Owens, Valdosta.  
 Delegate—A. F. Saunders, Valdosta.  
 Alternate—C. T. Williams, Valdosta.

### LAMAR COUNTY MEDICAL SOCIETY

Lamar County Medical Society announces the following officers for 1930:

President—C. H. Willis, Barnesville.  
 Vice-President—C. E. Rogers, Barnesville.  
 Secretary-Treasurer—J. M. Rogers, Barnesville.  
 Delegate—J. A. Corry, Barnesville.  
 Censors—J. A. Corry, D. W. Pritchett and J. M. F. Barron.

### TALIAFERRO COUNTY MEDICAL SOCIETY

Taliaferro County Medical Society announces the following officers for 1930:

President—Jno. A. Rhodes, Crawfordville.  
 Secretary-Treasurer—A. T. Ray, Sharon.  
 Delegate—A. C. Davidson, Sharon.

### COBB COUNTY MEDICAL SOCIETY

Cobb County Medical Society announces the following officers for 1930:

President—W. M. Gober, Marietta.  
 Vice-President—R. W. Fowler, Marietta.  
 Secretary-Treasurer—L. L. Welch, Marietta.  
 Secretary Protem—G. F. Hagood, Marietta.  
 Delegate—C. D. Elder, Marietta.  
 Alternate—H. W. Crouch, Marietta.  
 Censors—W. M. Kemp, R. W. Fowler and C. W. Burtz.

### COLQUITT COUNTY MEDICAL SOCIETY

Colquitt County Medical Society announces the following officers for 1930:

President—J. J. C. Wright, Doerun.  
 Vice-President—E. L. Lawson, Moultrie.  
 Secretary-Treasurer—T. H. Chestnutt, Moultrie.  
 Delegate—H. T. Edmondson, Moultrie.  
 Alternate—J. E. Lanier, Moultrie.  
 Censors—C. C. Brannen and E. L. Lawson.

### MUSCOGEE COUNTY MEDICAL SOCIETY

Muscogee County Medical Society announces the following officers for 1930:

President—C. A. Dexter, Columbus.  
 Vice-President—F. B. Blackmar, Columbus.  
 Secretary-Treasurer—H. J. Bickerstaff, Columbus.

### WASHINGTON COUNTY MEDICAL SOCIETY

Washington County Medical Society announces the following officers for 1930:

President—F. B. Rawlings, Sandersville.  
 Vice-President—N. J. Newsom, Sandersville.  
 Secretary-Treasurer—W. M. Cason, Sandersville.  
 Delegate—E. S. Peacock, Harrison.  
 Alternate—J. R. Burdett, Tennille.  
 Censors—J. B. Dillard, F. P. Harbin and S. B. Malone.

### MACON COUNTY MEDICAL SOCIETY

Macon County Medical Society announces the following officers for 1930:

President—G. W. Nelson, Marshallville.  
 Secretary-Treasurer—H. C. Derrick, Oglethorpe.

### TROUP COUNTY MEDICAL SOCIETY

Troup County Medical Society announces the following officers for 1930:

President—Enoch Callaway, LaGrange.  
 Vice-President—S. C. Rutland, LaGrange.  
 Secretary-Treasurer—H. McCulloh, Jr., West Point.  
 Delegate—Frank J. Amis, Hogansville.

### WHITFIELD COUNTY MEDICAL SOCIETY

Whitfield County Medical Society announces the following officers for 1930:

President—R. S. Bradley, Dalton.  
 Vice-President—J. C. Rollins, Dalton.  
 Secretary-Treasurer—E. O. Shellhorse, Dalton.

Delegate—J. H. Steed, Dalton.  
 Alternate—Trammell Starr, Dalton.  
 Censors—J. H. Steed, G. L. Broadrick and H. L. Erwin.

**WAYNE COUNTY MEDICAL SOCIETY**  
 Wayne County Medical Society announces the following officers for 1930:

President—J. Lawton Tyre, Screven.  
 Vice-President—I. K. Ogden, Odum.  
 Secretary-Treasurer—A. J. Gordon, Jesup.

**MONTGOMERY COUNTY MEDICAL SOCIETY**  
 Montgomery County Medical Society announces the following officers for 1930:

President—W. M. Moses, Uvalda.  
 Vice-President—H. C. Sharpe, Alston.  
 Secretary-Treasurer—J. E. Hunt, Mount Vernon.  
 Delegate—J. H. Dees, Alston.

**JENKINS COUNTY MEDICAL SOCIETY**  
 Jenkins County Medical Society announces the following officers for 1930:

President—M. E. Perkins, Millen.  
 Vice-President—H. G. Lee, Millen.  
 Secretary-Treasurer—C. Thompson, Millen.  
 Delegate—C. Thompson, Millen.  
 Alternate—Q. A. Mulkey, Millen.

**JEFFERSON COUNTY MEDICAL SOCIETY**  
 Jefferson County Medical Society announces the following officers for 1930:

President—J. J. Pilcher, Wrens.  
 Vice-President—J. O. Kelley, Avera.  
 Secretary-Treasurer—S. T. R. Revell, Louisville.  
 Delegate—S. T. R. Revell, Louisville.

#### GEORGIA MEDICAL SOCIETY (Chatham County)

Georgia Medical Society announces the following officers for 1930:

President—Lee Howard, Savannah.  
 Pres.-Elect—T. P. Waring, Savannah.  
 Vice-President—A. A. Morrison, Savannah.  
 Secretary-Treasurer—H. H. McGee, Savannah.  
 Delegate—R. V. Martin, Savannah.  
 Delegate—G. H. Lang, Savannah.  
 Alternate—Chas. Usher, Savannah.  
 Alternate—T. J. Charlton, Savannah.  
 Censors—Chas. Usher, G. H. Lang and H. T. Exley.

**SCREVEN COUNTY MEDICAL SOCIETY**  
 Screven County Medical Society announces the following officers for 1930:

President—H. W. Doster, Rocky Ford.  
 Vice-President—A. B. Reddick, Sylvania.  
 Secretary-Treasurer—L. F. Lanier, Sylvania.

**BUTTS COUNTY MEDICAL SOCIETY**  
 Butts County Medical Society announces the following officers for 1930:

President—A. F. White, Flovilla.  
 Vice-President—O. B. Howell, Jackson.  
 Secretary-Treasurer—R. L. Hammond, Jackson.  
 Delegate—A. F. White, Flovilla.

**GWINNETT COUNTY MEDICAL SOCIETY**  
 Gwinnett County Medical Society announces the following officers for 1930:

President—J. C. Orr, Buford.  
 Vice-President—A. D. Williams, Lawrenceville.  
 Secretary-Treasurer—D. C. Kelley, Lawrenceville.  
 Delegate—W. T. Hinton, Dacula.  
 Censor—W. J. Hutchins, Buford.

**CHATTOOGA COUNTY MEDICAL SOCIETY**  
 Chattooga County Medical Society announces the following officers for 1930:

President—E. M. Jennings, Menlo.  
 Vice-President—M. N. Wood, Menlo.  
 Secretary-Treasurer—H. D. Brown, Summerville.  
 Censors—B. F. Shamblin, N. A. Funderburk and R. N. Little.

**FLOYD COUNTY MEDICAL SOCIETY**  
 Floyd County Medical Society announces the following officers for 1930:

President—J. H. Mull, Rome.  
 Vice-President—C. H. McArthur, Rome.  
 Secretary-Treasurer—E. J. Radcliffe, Rome.  
 Delegate—A. F. Routledge, Rome.  
 Alternate—J. L. Garrard, Rome.  
 Censors—J. L. Garrard, W. J. Shaw and R. O. Simmons.

**BURKE COUNTY MEDICAL SOCIETY**  
 Burke County Medical Society announces the following officers for 1930:

President—J. M. Cook, Sardis.  
 Vice-President—J. B. Lewis, Waynesboro.  
 Secretary-Treasurer—W. W. Hillis, Sardis.  
 Delegate—H. F. Bent, Midville.  
 Alternate—J. M. Byne, Jr., Waynesboro.  
 Censors—W. R. Lowe, J. B. Lewis and J. M. Byne, Jr.

**OCMULGEE MEDICAL SOCIETY**  
 (Bleckley, Dodge, Pulaski)  
 Ocmulgee Medical Society announces the following officers for 1930:

President—Ernest L. Smith, Eastman.  
 Secretary-Treasurer—A. R. Bush, Hawkinsville.

**WORTH COUNTY MEDICAL SOCIETY**  
 Worth County Medical Society announces the following officers for 1930:

President—J. L. Tracy, Sylvester.  
 Vice-President—H. S. McCoy, Sylvester.  
 Secretary-Treasurer—Gordon S. Sumner, Sylvester.  
 Delegate—E. D. Ford, Doles.  
 Alternate—Gordon S. Sumner, Sylvester.  
 Censors—E. D. Ford, J. J. Crumbley and G. S. Sumner.

**GLYNN COUNTY MEDICAL SOCIETY**  
 Glynn County Medical Society announces the following officers for 1930:

President—H. L. Akridge, Brunswick.  
 Vice-President—H. M. Branham, Brunswick.  
 Secretary-Treasurer—F. N. Aldrich, Brunswick.

(Continued on Page 86)

## WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

President—Mrs. Marion T. Benson, Atlanta.  
 President-elect—Mrs. Chas. C. Harrold, Macon.  
 1st Vice-President—Mrs. J. A. Selden, Macon.  
 2nd Vice-President—Mrs. H. D. Allen, Sr.,  
 Milledgeville.  
 3rd Vice-President—Mrs. J. A. Redfearn, Albany.  
 Recording Secretary—Mrs. Lee Howard, Savannah.  
 Corresponding Secretary—Mrs. W. H. Garrison,  
 Clarkesville.

Treasurer—Mrs. Chas. E. Waits, Atlanta.  
 Parliamentarian—Mrs. J. E. Penland, Waycross.  
 Editor—Mrs. C. W. Roberts, Atlanta.  
 DELEGATES TO A. M. A. (1930)  
 Mrs. William R. Dancy, Savannah.  
 Mrs. C. C. Hinton, Macon.  
 DELEGATES TO S. M. A., MIAMI  
 Mrs. J. Cox Wall, Eastman.  
 Mrs. Ralston Lattimore, Savannah.

### AUXILIARY GEORGIA MEDICAL SOCIETY

*Savannah, Ga.*

#### *Auxiliary to Georgia Medical Society Elects Officers*

The Woman's Auxiliary to the Georgia Medical Society held its annual meeting recently at the home of Mrs. C. H. Johnson on East Ogletthorpe Avenue. The following officers were elected:

President, Mrs. Lee Howard.  
 First Vice-President, Mrs. J. K. Quattlebaum.  
 Second Vice-President, Mrs. Charles Usher.  
 Recording Secretary, Mrs. H. H. McGee.  
 Corresponding Secretary, Mrs. G. T. Olmstead.  
 Treasurer, Mrs. Rufus Graham.

The officers elected were those named by the nominating committee which was composed of Mrs. A. J. Waring, chairman; Mrs. William Dancy and Mrs. Ralston Lattimore.

Mrs. John W. Daniel, the retiring president, gave a very interesting and full report of the work of the past year. All the other officers also gave very gratifying reports. A committee was appointed to revise the constitution and by-laws and to report at the April meeting. On this committee are Mrs. H. H. McGee and Mrs. Ralston Lattimore. The April meeting will be held at the home of Mrs. W. R. Dancy on East Gaston Street, and she and Mrs. John Daniel will be the hostesses for the meeting.

At the close of the business meeting Mrs. Johnson entertained the members at a social hour and served delightful refreshments.

### WOMAN'S AUXILIARY TO THE JEFFERSON COUNTY MEDICAL SOCIETY ORGANIZED

On November first the Woman's Auxiliary to the Jefferson County Medical Society was organized at the lovely home of Mrs. S. T. R. Revell, Louisville, with eight members.

The following officers were elected:  
 Mrs. S. T. R. Revell, Louisville, President.  
 Mrs. J. D. Peacock, Wadley, Secretary and Treasurer.

Meetings are to be held quarterly.

Respectfully submitted,

MRS. J. D. PEACOCK, Sec.-Treas.,  
 Woman's Auxiliary to the Jefferson County  
 Medical Society.

### *Directory*

#### FIRST DISTRICT Bulloch-Candler Counties

Mrs. R. L. Cone, Statesboro  
 Mrs. E. C. Watkins, Brooklet  
 Mrs. W. E. Simmons, President, Metter  
 Mrs. R. L. Kennedy, Metter  
 Mrs. A. J. Mooney, Statesboro  
 Mrs. B. A. Deal, Statesboro  
 Mrs. B. B. Jones, Metter  
 Mrs. J. L. Nevil, Metter  
 Mrs. A. J. Bowen, Portal  
 Mrs. J. B. McElveen, Brooklet  
 Mrs. D. L. Deal, Stilson  
 Mrs. N. D. Kennedy, Metter  
 Mrs. H. H. Oliff, Register  
 Mrs. N. D. Woods, Portal

#### Chatham County

Mrs. Ralston Lattimore, 109 E. 52nd  
 Street, Savannah  
 Mrs. John Daniel, President, 102 E.  
 Henry Street, Savannah  
 Mrs. V. H. Bassett, 1010 Park Avenue,  
 E., Savannah  
 Mrs. Win. Shearhouse, 532 East 41st  
 Street, Savannah  
 Mrs. Lee Howard, 1303 East 40th Street,  
 Savannah  
 Mrs. T. J. Charlton, 220 Ogletthorpe  
 Avenue, E., Savannah



Mrs. W. R. Dancy, 308 East Gaston Street, Savannah  
 Mrs. R. E. Graham, 513 West 37th Street, Savannah  
 Mrs. R. V. Harris, 19 East Gordon Street, Savannah  
 Mrs. H. W. Hesse, 112 East Jones Street, Savannah  
 Mrs. J. S. Howkins, Sr., 209 East Gaston Street, Savannah  
 Mrs. G. H. Johnson, 116 East Oglethorpe Avenue, Savannah  
 Mrs. G. H. Lang, 414 East 48th Street, Savannah  
 Mrs. Lawrence Lee, 527 East 44th Street, Savannah  
 Mrs. C. H. Meldrim, 212 West 32nd Street, Savannah  
 Mrs. W. H. Myers, 121 East Jones Street, Savannah  
 Mrs. G. T. Olmstead, 333 East 43rd Street, Savannah  
 Mrs. E. S. Osborne, 19 East Jones Street, Savannah  
 Mrs. C. K. Redmond, 707 Barnard Street, Savannah  
 Mrs. H. Y. Righton, 401 East 45th Street, Savannah  
 Mrs. J. S. Howkins, Jr., Savannah  
 Mrs. F. Wahl, Savannah  
 Mrs. J. O. Baker, Savannah  
 Mrs. M. F. Dunn, Savannah  
 Mrs. Julian Chisholm, Savannah  
 Mrs. Craig Barrow, Savannah  
 Mrs. G. H. Faggort, Savannah  
 Mrs. St. J. De Cardeuc, Savannah  
 Mrs. T. P. Waring, Savannah  
 Mrs. J. N. Carter, 107 E. Jones St., Savannah  
 Mrs. D. B. Edwards, 606 Drayton St., Savannah  
 Mrs. A. J. Waring, 2912 Atlantic Ave., Savannah  
 Mrs. H. H. McGee, 211 Huntingdon St., Savannah

#### Screven County

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 Mrs. J. W. Powell, Sylvania  
 Mrs. Earnest Downing, Sylvania  
 Mrs. W. H. Doster, Sylvania  
 Mrs. Connies Overstreet, Sylvania  
 Mrs. Ezell, Oliver

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 Mrs. Thomas Chason, Donalsonville  
 Mrs. E. C. Smith, Donalsonville

#### THIRD DISTRICT

##### Dooley County

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 Mrs. V. L. Harris, Pinchurst  
 Mrs. R. H. Pate, Unadilla  
 Mrs. E. B. Davis, President, Byromville  
 Mrs. D. W. Kitchens, Byromville

##### Sumter County

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 Mrs. Herschel Smith, Americus  
 Mrs. B. T. Wise, President, Plains  
 Mrs. B. J. Wise, Plains  
 Mrs. Emmett Anderson, Americus  
 Mrs. C. A. Primrose, Americus  
 Mrs. J. T. Stukes, Plains  
 Mrs. J. C. Logan, Plains  
 Mrs. H. M. Tolleson, Smithville

Mrs. W. H. Houston, Americus

#### Terrell County

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 Mrs. R. E. Bowman, Bronwood  
 Mrs. J. R. Crawford, Bronwood  
 Mrs. Guy Chappell, Bronwood  
 Mrs. U. P. Durham, Sasser  
 Mrs. S. P. Kenyon, Dawson  
 Mrs. Lucius Lamar, Dawson  
 Mrs. J. H. Lewis, Dawson  
 Mrs. R. R. Holt, Parrott  
 Mrs. John Morris, Dawson  
 Mrs. Logan Thomas, Dawson

#### Ben Hill County

Mrs. J. L. Fraser, R. F. No. 4, Fitzgerald

#### FOURTH DISTRICT

##### Troup County—(No Report)

#### FIFTH DISTRICT

##### Fulton County

Mrs. Robin Adair, 1031 Ponce de Leon Ave., N. E., Atlanta  
 Mrs. E. A. Allen, 1384 West Peachtree St., N.W., Atlanta  
 Mrs. Wiley S. Ansley, 212 S. Candler St., Decatur  
 Mrs. J. F. Arthur, 820 Piedmont Ave., N.E., Atlanta  
 Mrs. H. H. Askew, 1329 Springdale Road, N.E., Atlanta  
 Mrs. G. Bachmann, 1088 Lullwater Road, N.E., Atlanta  
 Mrs. L. G. Baggett, 9 Delmont Drive, Atlanta  
 Mrs. E. G. Ballenger, 60 E. 16th St., N.E., Atlanta  
 Mrs. E. A. Bancker, 811 Piedmont Ave., N.E., Atlanta  
 Mrs. F. M. Barfield, 25 Peachtree Battle Ave., Atlanta  
 Mrs. J. R. Barfield, Clifton Road, N.E., Atlanta  
 Mrs. S. T. Barnett, 259 Fourteenth St., N.E., Atlanta  
 Mrs. R. A. Bartholomew, 198 Ponce de Leon Ave., N.E., Atlanta  
 Mrs. M. T. Benson, 1040 Springdale Road, N.E., Atlanta  
 Mrs. F. Lee Bivings, 1115 Ponce de Leon Ave., N.E., Atlanta  
 Mrs. W. W. Blackman, 248 West Andrews Drive, Atlanta  
 Mrs. J. C. Blalock, 1194 North Ave., N.E., Atlanta  
 Mrs. F. K. Roland, 252 Peachtree Circle, Atlanta  
 Mrs. Montague Boyd, Habersham Road, Atlanta  
 Mrs. C. E. Boynton, Habersham Road, R. F. D. 131, Atlanta  
 Mrs. Cliff Brannen, 1068 Peachtree Road, Atlanta  
 Mrs. A. F. Brawner, Smyrna, Ga.  
 Mrs. Jas. N. Brawner, 2800 Peachtree Road, Atlanta  
 Mrs. L. E. Brawner, 767 Greenwood Ave., N.E., Atlanta  
 Mrs. S. T. Brown, 2800 Peachtree Road, Atlanta  
 Mrs. Allen H. Bunce, 360 Ponce de Leon Ave., N.E., Atlanta  
 Mrs. O. B. Bush, 571 Park Drive, N.E., Atlanta  
 Mrs. T. S. Burgess, 63 LaFayette Drive, N.E., Atlanta

Mrs. W. L. Ballenger, Lindbergh Drive, Atlanta  
 Mrs. E. S. Byrd, 1207 Oxford Road, N.E., Atlanta  
 Mrs. R. T. Camp, Fairburn  
 Mrs. A. F. Caldwell, 30 Martina Drive, Atlanta  
 Mrs. F. P. Calhoun, Andrews Drive, Atlanta  
 Mrs. J. L. Campbell, 1315 Fairview Road, N.E., Atlanta  
 Mrs. W. E. Campbell, 721 Juniper St., N.E., Atlanta  
 Mrs. J. B. Carothers, 1136 Briarcliff Place, N.E., Atlanta  
 Mrs. W. L. Champion, 1323 Ponce de Leon Ave., N.E., Atlanta  
 Mrs. J. R. Childs, 1965 Ponce de Leon Ave., N.E., Atlanta  
 Mrs. J. J. Clark, 1081 Springdale Road, N.E., Atlanta  
 Mrs. Wesley Coburn, 907 Piedmont Ave., N.E., Atlanta  
 Mrs. O. S. Cofer, 1337 Briarcliff Road, N.E., Atlanta  
 Mrs. T. J. Collier, 1781 Peachtree Road, Atlanta  
 Mrs. Newton Craig, Muscogee Ave., Atlanta  
 Mrs. E. D. Crawford, 758 Highland Ave., N.E., Atlanta  
 Mrs. M. G. Campbell, 538 Ponce de Leon Ave., Atlanta  
 Mrs. W. C. Dabney, 602 Clifton Road, N.E., Atlanta  
 Mrs. Leo P. Daly, 360 Ponce de Leon Ave., N.E., Atlanta  
 Mrs. W. W. Daniel, 948 Highland Ave., N.E., Atlanta  
 Mrs. Hal Davison, 1165 Boulevard, N.E., Atlanta  
 Mrs. John F. Denton, 1503 Peachtree St., Atlanta  
 Mrs. R. T. Dorsey, Peachtree Road, Atlanta  
 Mrs. W. M. Dunn, Peachtree Road at Andrews Drive, Atlanta  
 Mrs. Chas. E. Downman, 630 Linwood Ave., N.E., Atlanta  
 Mrs. R. R. Daly, 1262 Lucile Ave., S.W., Atlanta  
 Mrs. W. B. DuVall, 905 Cascade Ave., S.W., Atlanta  
 Mrs. E. C. Davis, 741 Spring Street, Atlanta  
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 Mrs. Ed Green, 156 Huntington Road, Atlanta  
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 Mrs. W. A. Hodges, 492 Page Ave., Atlanta  
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 Mrs. Francis Jones, 172 Fourteenth St., N.E., Atlanta  
 Mrs. Spencer Kirkland, 591 Linwood Ave., N.E., Atlanta  
 Mrs. G. F. Klugh, 395 Tenth St., N.E., Atlanta  
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 Mrs. Geo. M. Murray, 999 Spring St., N.W., Atlanta  
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 Mrs. J. A. McGarity, 581 Clifton Road, N.E., Atlanta  
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 Mrs. Harold McDuffie, 322 Ninth St., N.E., Atlanta  
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 Mrs. Geo. M. Niles, 193 Fourteenth St., Atlanta  
 Mrs. Geo. H. Noble, Sr., 1222 Peachtree St., Atlanta  
 Mrs. L. T. Pattillo, 1265 McLendon Ave., N.E., Atlanta

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 Mrs. Carl I. Pirkle, 516 Barnett St., N.E., Atlanta  
 Mrs. Earl Quillian, 986 Ponce de Leon Ave., N.E., Atlanta  
 Mrs. Willis Ragan, 826 Peachtree St., Atlanta  
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 Mrs. C. A. Rhodes, 129 Brighton Road, Atlanta  
 Mrs. C. W. Roberts, 1085 St. Charles Place, N.E., Atlanta  
 Mrs. J. W. Roberts, 727 Juniper St., N.E., Atlanta  
 Mrs. Dunbar Roy, Georgian Terrace Hotel, Atlanta  
 Mrs. L. C. Rouglin, 1017 St. Charles Ave., N.E., Atlanta  
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 Mrs. W. A. Selman, President, 760 Penn Ave., N.E., Atlanta  
 Mrs. B. L. Shackelford, 1419 Lanier Place, N.E., Atlanta  
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 Mrs. Edgar Shanks, 1431 Fairview Road, N.E., Atlanta  
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 Mrs. Cecil Stockard, Smyrna, Ga., R. F. D.  
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 Mrs. J. D. Thomson, 2222 Peachtree Road, Atlanta  
 Mrs. W. A. Upchurch, 1274 Oxford Road, N.E., Atlanta  
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 Mrs. C. E. Ware, 175 E. 17th St., N.E., Atlanta  
 Mrs. W. C. Warren, Jr., 980 Briarcliff Road, N.E., Atlanta  
 Mrs. W. C. Warren, Sr., 756 W. Peachtree St., N.E., Atlanta  
 Mrs. W. C. Waters, Jr., 878 Virginia Ave., N.E., Atlanta  
 Mrs. J. G. Wood, 327 Virginia Ave., N.E., Atlanta  
 Mrs. H. Claud Wood, 1326 McLendon Ave., N.E., Atlanta

Mrs. C. A. Wilkins, West Paces Ferry Road, Atlanta  
 Mrs. Bernard Wolff, 48 Peachtree Place, N.E., Atlanta  
 Mrs. Jos. Yampolsky, 746 Brookridge Drive, N.E., Atlanta  
 Mrs. F. W. Hinkle, Atlanta  
 Mrs. Emmett Ward, Atlanta

## SIXTH DISTRICT

## Bibb County

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 Mrs. W. J. Little, Macon  
 Mrs. G. P. Gostin, Macon  
 Mrs. F. M. Cunningham, Macon  
 Mrs. T. N. Carswell, Macon  
 Mrs. Tom Hurley, Shirley Hills, Macon  
 Mrs. H. P. Derry, College St., Macon  
 Mrs. M. A. Clark, Hardeman Ave., Macon  
 Mrs. W. A. Williams, Stanislaus Place, Macon  
 Mrs. Herring Winship, Cherokee Ave., Macon  
 Mrs. Harry Moses, Vineville Ave., Macon  
 Mrs. J. A. Selden, Ingleside, Macon  
 Mrs. J. L. King, Buford Place, Macon  
 Mrs. Benj. Bashinski, President, Buford Place, Macon  
 Mrs. H. G. Weaver, Clayton St., Macon  
 Mrs. Carl L. Anderson, College St., Macon  
 Mrs. Fred Webb, Macon Hospital, Macon  
 Mrs. O. H. Weaver, Buford Place, Macon  
 Mrs. A. R. Rozar, Shirley Hills, Macon  
 Mrs. C. L. Pennington, Shirley Hills, Macon  
 Mrs. W. A. Newman, High St., Macon  
 Mrs. C. H. Richardson, Jr., Cherokee Ave., Macon  
 Mrs. Ernest Corn, Courtland Ave., Macon  
 Mrs. J. P. Holmes, Ingleside, Macon  
 Mrs. O. S. Spivey, Ingleside, Macon  
 Mrs. W. E. Mobley, Jr., Massee Apartments, Macon  
 Mrs. C. C. Hinton, Massee Apartments, Macon  
 Mrs. Wallace Bazemore, Beverley Place, Macon  
 Mrs. G. Y. Massenberg, Shirley Hills, Macon  
 Mrs. D. T. Henderson, Stanislaus Place, Macon  
 Mrs. D. D. Walker, Georgia Ave., Macon  
 Mrs. W. W. Merriweather, Inverness Ave., Macon  
 Mrs. B. W. Green, Clisby Place, Macon  
 Mrs. J. B. Kay, Byron, Ga.  
 Mrs. J. C. McAfee, Forsyth Road, Macon  
 Mrs. T. E. Rogers, Clisby Place, Macon  
 Mrs. C. C. Harrold, Orange St., Macon  
 Mrs. Fred Adams, Clayton Ct., Macon  
 Mrs. J. D. Applewhite, Forsyth Circle, Macon  
 Mrs. R. W. Richardson, Forsyth Road, Macon  
 Mrs. J. C. Anderson, Orange Street, Macon  
 Mrs. J. E. Clay, Hines Terrace, Macon  
 Mrs. R. L. Cater, Jr., Buford Place, Macon

Mrs. R. C. Goolesby, Jr., Napier Ave.,  
Macon  
Mrs. Thomas Harrold, Orange St.,  
Macon  
Mrs. A. P. Kemp, Massee Apartments,  
Macon  
Mrs. O. F. Keen, Napier Ave., Macon  
Mrs. J. T. Ross, College St., Macon  
Mrs. John Martin, Clisby Place, Macon  
Mrs. J. M. Kiser, North St., Macon  
Mrs. R. G. Newton, College St., Macon  
Mrs. O. R. Thompson, Ingleside, Macon  
Mrs. Bernard Gostin, Orange St.,  
Macon

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Hartwell  
Mrs. Owen Meredith, Hartwell  
Mrs. George Clark, Hartwell  
Mrs. B. C. Teasley, Hartwell  
Mrs. W. I. Hailey, Hartwell  
Mrs. J. I. Jenkins, Hartwell  
Mrs. G. T. Harper, Hartwell  
Mrs. W. E. McCurry, Hartwell

##### Elbert County

Mrs. A. C. Smith, President, Elberton  
Mrs. D. V. Bailey, Elberton  
Mrs. D. N. Thompson, Elberton  
Mrs. W. A. Johnson, Bowman  
Mrs. J. E. Johnson, Elberton  
Mrs. O. B. Walker, Bowman  
Mrs. B. B. Mattox, Bowman  
Mrs. F. L. Adams, Bowman  
Mrs. A. S. Johnson, Bowman

##### Madison County

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Mrs. H. H. Hampton, Colbert  
Mrs. G. L. Loden, Colbert  
Mrs. R. J. Westbrook, Ila  
Mrs. W. D. Gholson, Danielsville  
Mrs. Flora Westbrook (Honorary)

##### Clarke County

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Ave., Athens  
Mrs. W. J. H. Birdsong, Cobb St., Athens  
Mrs. Paul L. Holliday, West View  
Drive, Athens  
Mrs. W. H. Cabaniss, Cloverhurst,  
Athens  
Mrs. A. A. Carlton, Milledge Ave.,  
Athens  
Mrs. G. T. Canning, Prince Ave., Athens  
Mrs. C. J. Decker, Milledge Ave., Athens  
Mrs. H. M. Fullilove, Milledge Ave.,  
Athens  
Mrs. R. M. Goss, Milledge Ave., Athens  
Mrs. A. C. Holliday, Hill St., Athens  
Mrs. J. C. Holliday, Milledge Ave.,  
Athens  
Mrs. M. F. Matthews, Hill St., Athens  
Mrs. J. C. McKinney, Baxter St., Athens  
Mrs. A. A. Rayle, Woodlawn, Athens  
Mrs. H. I. Reynolds, Hampton Court,  
Athens  
Mrs. S. S. Smith, Prine Ave., Athens  
Mrs. G. O. Welchell, Henderson Ave.,  
Athens  
Mrs. B. B. Bagby, Oglethorpe Ave.,  
Athens  
Mrs. Charles Brightwell, Milledge Ave.,  
Athens  
Mrs. Francis Long-Taylor (Hon. Mem.)  
Athens  
Miss Emma Long (Hon. Mem.) Athens

Mrs. W. B. Carey (Hon. Mem.)  
Athens

#### NINTH DISTRICT Jackson County

Mrs. Ralph Freeman, Hoschton  
Mrs. J. C. Verner, Commerce  
Mrs. A. A. Rogers, Commerce  
Mrs. E. M. McDonald, Jefferson  
Mrs. J. C. Bennett, Sr., Jefferson  
Mrs. C. B. Lord, Jefferson  
Mrs. S. J. Smith—widow, Jefferson  
Mrs. L. C. Allen, Hoschton  
Mrs. M. B. Allen, President, Hoschton  
Mrs. L. J. Sharp, Commerce  
Mrs. T. L. Holcombe, Jefferson  
Mrs. O. E. Shankle, Commerce  
Mrs. F. M. Hubbard, Commerce

##### Barrow County

Mrs. E. R. Harris, President, Winder  
Mrs. C. B. Almond, Winder  
Mrs. W. L. Matthews, Winder  
Mrs. S. T. Ross, Winder  
Mrs. W. T. Randolph, Winder  
Mrs. Ralph Cross, Winder

##### Cherokee-Pickens Counties

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Mrs. David H. Garrison, Tate  
Mrs. Newton J. Coker, Canton  
Mrs. Grady N. Coker, Canton  
Mrs. James R. Boring, President, Canton  
Mrs. Samuel R. Harlin, Canton  
Mrs. J. A. Faulkner, Canton, R. F. D.  
Mrs. John T. Pettit, Canton  
Mrs. John P. Turk, Nelson  
Mrs. W. O. Rhodes, Holly Springs  
Mrs. Thomas J. Vansant, Woodstock  
Mrs. R. M. Moore, Waleska  
Mrs. Marion G. Hendrix, Ball Ground

##### Habersham County

Mrs. Robert Lamb, Demorest  
Mrs. W. H. Garrison, Clarkesville  
Mrs. O. N. Hardin, Cornelia  
Mrs. P. Y. Duckett, Cornelia  
Mrs. C. V. Chandler, Baldwin  
Mrs. E. H. Lamb, Cornelia  
Mrs. J. B. Jackson, Clarkesville  
Mrs. J. H. McClure, Cornelia  
Mrs. T. H. Brabson, Cornelia

##### Hall County

Mrs. J. H. Downey, President,  
Gainesville  
Mrs. J. B. Rudolph, Gainesville  
Mrs. L. R. Bryson, Gainesville  
Mrs. J. K. Burns, Jr., Gainesville  
Mrs. B. B. Davis, Gainesville  
Mrs. E. T. Gibbs, Gainesville  
Mrs. L. G. Neal, Cleveland  
Mrs. R. L. Rogers, Gainesville  
Mrs. Scott Titshaw, Gainesville

#### TENTH DISTRICT Baldwin County

Mrs. H. D. Allen, Sr., Milledgeville  
Mrs. Richard Binion, Milledgeville  
Mrs. J. I. Garrard, Milledgeville  
Mrs. E. W. Allen, Milledgeville  
Mrs. John Mobley, President, Milledge-  
ville  
Mrs. Y. H. Yarborough, Milledgeville  
Mrs. J. C. Stathein, Milledgeville  
Mrs. N. P. Walker, Milledgeville  
Mrs. H. D. Allen, Jr., Milledgeville  
Mrs. C. L. Cox, Milledgeville  
Mrs. George Echols, Milledgeville

Mrs. T. M. Hall, Milledgeville  
Mrs. L. M. Jones, Milledgeville  
Mrs. L. P. Longino, Milledgeville  
Mrs. W. M. Scott, Milledgeville  
Mrs. R. C. Swint, Milledgeville

##### Washington County

Mrs. James B. Dillard, President,  
Davisboro  
Mrs. B. O. Joiner, Tennille  
Mrs. F. B. Rawlings, Sandersville  
Mrs. N. H. Lozier, Sandersville  
Mrs. C. D. Redding, Sandersville  
Mrs. E. A. Harris, Sandersville  
Mrs. F. P. Harbin, Oconee  
Mrs. B. L. Helton, Sandersville  
Mrs. S. B. Malone, Sandersville  
Mrs. D. E. McMaster, Tennille  
Mrs. N. J. Newsom, Sandersville  
Mrs. N. Overby, Sandersville  
Mrs. E. S. Peacock, Harrison  
Mrs. O. L. Rogers, Sandersville  
Mrs. W. B. Warthen, Davisboro  
Mrs. T. E. Vickers, Harrison  
Mrs. Ralph Taylor, Davisboro  
Mrs. W. C. Troutman, Tennille

#### ELEVENTH DISTRICT

##### Lowndes County

Mrs. H. G. Huey, President, Homerville  
Mrs. P. H. Askew, Nashville  
Mrs. G. R. Parker, Enigma  
Mrs. B. O. Quillian, Willacoochee  
Mrs. F. C. Story, Jesup  
Mrs. J. R. Smith, Douglas

##### Ware County

Mrs. W. F. Reavis, Waycross  
Mrs. W. M. Folks, Waycross  
Mrs. K. McCullough, Waycross  
Mrs. R. L. Johnson, Waycross  
Mrs. R. C. Walker, Waycross  
Mrs. J. L. Walker, (Honorary) Way-  
cross  
Mrs. D. M. Bradley, Waycross  
Mrs. W. C. Hafford, Waycross  
Mrs. B. H. Minchew, Waycross  
Mrs. J. E. Penland, Waycross  
Mrs. C. M. Stephens, Waycross  
Mrs. W. D. Mixson, Waycross  
Mrs. G. E. Atwood, Waycross  
Mrs. B. R. Russell, Waycross

#### TWELFTH DISTRICT

##### Laurens County

Mrs. E. B. Claxton, Dublin  
Mrs. J. W. Edmondson, Dublin  
Mrs. W. E. Beddingfield, President,  
Cadwell  
Mrs. A. T. Coleman, Dublin  
Mrs. W. C. Thompson, Dublin  
Mrs. H. F. Montford, Dublin  
Mrs. C. A. Hodges, Dublin  
Mrs. W. L. Brigham, Dublin

##### Emanuel County

Mrs. J. N. Nunez, Swainsboro  
**From the State-at-Large**  
Mrs. S. A. Boland, Thomson, Ga.  
Mrs. B. T. Wise, Plains, Ga.  
Mrs. C. K. Sharp, Arlington, Ga.  
Mrs. S. D. Brown, Royston, Ga.  
Mrs. C. L. Ayers, Toccoa, Ga.  
Mrs. W. B. Heller, Toccoa, Ga.  
Mrs. Fred Wheelchel, Alto, Ga.  
Mrs. J. C. Burch, Alto, Ga.  
Mrs. E. W. Gliddin, Alto, Ga.  
Mrs. J. A. Redfearn, Albany, Ga.  
Mrs. Cox Wall, Eastman, Ga.



# BOOK REVIEWS AND ABSTRACTS

## BOOK REVIEWS

MONOGRAPH ON MALARIA: INTERMITTENT FEVERS. By D. Drysdale Anderson, M. R. C. S., L. R. C. P., D. T. M. & H. (Eng.), Medical Officer of Health, West African Medical Staff. Formerly Tuberculosis Officer, Mauritius. Fellow, Royal Society of Tropical Medicine and Hygiene. Member National Association for the Prevention of Tuberculosis (Eng.). Fellow Royal Colonial Institute. Introduction by Allen H. Bunce, A. B., M. D., F. A. C. P. With 78 illustrations, 28 of which are in colors. Atlanta: S. J. Pridgen Co., 1930. This is the initial monograph of The Ready Reference Medicine and Surgery being issued by the publishers.

## INTRODUCTION

I have just finished the reading of Dr. Anderson's monograph on "Malaria" which I began with indifference but concluded with enthusiasm. For its length, and it is sufficiently long to cover the subject adequately, it is the best article on the subject that I have ever read.

His description of the forms of the malarial parasite is accurate and carefully illustrated. His illustrations and description of the parasite in the mosquito, a knowledge of which is so necessary for the proper understanding of the disease, are very clearly presented in an understandable manner.

He gives an excellent clinical description and thoroughly covers the sequelae and complications. The clinical pathology of the different types of malarial fever and the post-mortem findings receive adequate treatment.

In discussing the diagnosis he states, "No disease shows an intermittent fever every other day apart from benign tertian malaria. No disease shows a sudden rise and fall in temperature every third day apart from simple quartan malaria. No disease shows repeated cycles of a sudden rise and fall in temperature two days running followed by one of apyrexia apart from double quartan malaria."

He gives other valuable suggestions for the

clinical diagnosis as well as the positive diagnosis by finding the parasite in the blood. He warns against allowing an enlarged spleen to weigh too heavily in diagnosis, since this is found in many other conditions.

The section on "Differential Diagnosis," while brief, is valuable, especially "the differential diagnosis of coma in the tropics." His methods are so clear and logical that they make diagnosis of the various types definite and the treatment easily applicable.

The section on "Laboratory Technique," covering both the examination of the blood and the examination of the mosquito, contains detailed instruction as to the best methods of procedure. Commenting on the importance of the dissection of the mosquito he states:

"In an anti-malarial campaign it is necessary to know which of the local species of *Anopheles* are the carriers of the parasite. This can only be done by finding it in the body of the vector; for this purpose the stomach and salivary glands must be examined."

In discussing the treatment he gives the principal place to quinine and describes its mode of action on the parasite, the different salts of quinine and their relative importance.

Although he states that the intravenous method "acts like a charm" in emergencies he is extremely cautious as to the dosage, with which I thoroughly agree. Other remedies explained are Stovarsol and Plasmochin, together with the general treatment of the disease.

Under "Personal Prophylaxis" he states, "quinine should be made a habit" to be continued as long as one is in a malaria infected zone.

The section on "Malarial Prevention" is especially valuable. It alone makes this excellent article worth reading. He states:

"Before undertaking prevention on a large scale, information must be obtained under the following heads:

"The prevalent genera of the vector.

"Their degree of prevalence.

"Their breeding places.

"The prevalent type of parasite.

"The spleen rate.

"The percentage of the population examined in whose blood gametocytes are found.

"Vital statistics of the disease to be obtained from government and institutional returns."

The article is concluded with a discussion of malaria in the treatment of general paralysis of the insane.

Malaria is now, and will continue to be for many years, one of the most important public health problems in this section of the country. While much has been written on the subject, the reader will find that Dr. Anderson's excellent article contains many agreeable surprises.

It covers his researches in the malarial sections of the British possessions for a number of years as an expert on the subject of malaria, and reflects his knowledge gained by this extensive study and research, as well as that obtained through the London School of Hygiene and Tropical Medicine, the Bureau of Hygiene and Tropical Diseases of London and "The Tropical Diseases Bulletin."

It is not only sound from a scientific standpoint, but forms interesting reading. The manuscript reaches a high order of perfection and the illustrations are comprehensive and beautifully executed.

ALLEN H. BUNCE, M.D.

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*"Bodily Changes in Pain, Hunger, Fear and Rage: An Account of Recent Researches Into the Function of Emotional Excitement,"* by Walter B. Cannon. Second Edition. Price, \$3.00. 404 pages with illustrations. New York. D. Appleton and Co. 1929.

This is the second edition of Dr. Cannon's great work on the physiological changes in emotion, and needs no introduction to physicians. Five new chapters are added in this edition, dealing with thirst, changes in the blood associated with emotion, emotional derangement of body functions, and two chapters on theories of emotion.

The book is written in popular style, and devoid of technical terms. Some of the conditions discussed are the effect of emotions on the gastro-intestinal tract, (motor and secretory), the increased secretion of adrenalin, increase in blood sugar, the counter-action of muscular fatigue, the hastening of coagulability of the blood, the increase in red blood cells in the peri-

pheral circulation. These changes occurring in emotion, and brought about through the activity of the sympathetic nervous system, may be considered as having their purpose in the preparation of the organisms for an emergency, such as fight or flight. It is interesting that the effects last for some time after the cessation of the stimulus which provokes them. Unlike hunger, thirst is shown to depend on a generalized body condition, the lack of water in the body being followed by diminished secretion from the salivary glands, with drying of the buccal and pharyngeal mucosa, thereby producing the sensation of thirst. In discussing the theory of emotion, much importance is ascribed to the thalamus—"the peculiar quality of the emotion is added to simple sensation when the thalamic processes are aroused." This is in accordance with experiences in organic neurology. Cannon's work is fundamental for the understanding of the effects of emotion, and the symptoms in the psychoneuroses.

WM. A. SMITH, M.D.

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*The Medical Museum, Based on a New System of Visual Teaching* by S. H. Daukes, Director. The Wellcome Museum of Medical Science. Size 10"x7". Pages, 172. (The Wellcome Foundation, Ltd., Endleigh Court, 33 Gordon Street, London. W. C. 1, England.)

This book is not merely a theoretical contribution to the improvement of museums in general and medical museums in particular, but a description of practical achievement based upon theory and vision.

The author is precise, clear and has obviously devoted much study, skill and care to a subject on which this book stamps him as an expert. Having in the first chapter discussed the functions of a medical museum and made a plea for reform and for a wider outlook, Dr. Daukes proceeds in subsequent chapters to describe and discuss the details of the new system of visual teaching on which the ideal medical museum is based.

This is followed by appendices dealing with the application and development of the system, with types of buildings, walls, screens, cases, labels, illustrations and technical details of preserving and mounting specimens. In conclusion there is a very valuable and complete bibliography of technical museum publications and 45 whole-page illustrations of screens, sections and specimens which are most helpful as providing practical evidence of the soundness and practicability of this new system of visual teaching.

The letterpress is in large, easily read type and the typography gives an air of distinction to the publication which is further enhanced by the technical perfection of the photographs of difficult subjects and the high quality of the half tone reproductions.

Everyone interested in museums, whether in regard to construction, development, control or use, should read and study this book. Having done so there will be a natural desire to see its methods developed in actual practice, which, fortunately, is possible for all those who can visit The Wellcome Museum of Medical



Science, 33 Gordon Street, London, England, of which Dr. Daukes is Director.

*Harpers Medical Monographs.* It is manifestly impossible for the man in general practice to read all of the current literature; it is even difficult for him properly to evaluate the sometimes contradictory papers that he does read. If he goes to the expense of a system of medicine he may still lack the time to familiarize himself with its content. The popular monograph has therefore been produced to meet the needs of the practitioner, who wants to be able to get at once the concise considered opinion of a good reliable man on a subject he is interested in. Harper & Brothers have taken upon themselves to supply this need. Although these books are well printed on good paper and substantially bound, the publishers have succeeded in keeping the price low enough (\$2.50) for the doctor to throw away the old when a new edition is issued. They are also small enough to be slipped into the pocket. The reviewer is impressed with the tone of the two volumes of the series he has read, and believes the publishers are doing a good work.

*Syphilis Acquired and Heredisyphilis*, by Charles C. Dennie, B.S., M.D., Assistant Professor of Dermatology and Syphilology, University of Kansas School of Medicine; Chief of Heredisyphilic Clinic, Kansas City General Hospital, etc. Price, \$2.50. Pp. 310. Harper & Brothers, publishers, 1928.

This book is difficult to criticize—Typographical errors are too common for a Harper publication: interocular syphilis, intracellular lymphocytes, scopoldmine, bichloridal and bichloridol interchangeably. The gravest typographical error is found on p. 187, where 1 gram (which is 15½ grains) of bichloride is advised for weekly intramuscular injection in cases of cardiovascular syphilis. There are also evidences—to the eye of an ex-school teacher—of sloppy composition, for example, sentences without a verb, split infinitives and phrases such as "a complete serology" and "positive blood." The greatest defect is the absence of photographs and of an index.

In a work of this kind one must expect a rather dogmatic attitude on the part of the author and should not look for an extensive bibliography. The reviewer must take exception, however, to the subject matter in a few places:

1. In discussing the result of treatment of syphilis of the stomach, he says, "The X-Ray shows practically no changes in the stomach's condition." Eusterman and others have long taught that to make a diagnosis of gastric syphilis, it is necessary to see a lesion which has been roentgenographically demonstrated disappear under antisyphilitic treatment. Syphilitic persons are just as subject to cancer of the stomach as other people, and there is always danger that a cancer may progress to the inoperable stage while antiluetic therapy is being tried. If one is satisfied not to see restitution of the normal contour of the stomach under specific treatment, this danger would seem to be many times increased.

2. The reviewer was interested to read, with regard to the lungs, "Treatment should be limited to mercury and the arsphenanines, as potassium iodide would be deadly if tuberculosis were present." This is unquestionably the traditional belief, but some physicians in Atlanta prescribe iodides more or less routinely in their treatment of pulmonary tuberculosis, and are satisfied with their results. Dr. Woods Price of Saranac Lake, recently told the reviewer that, although he personally did not and would not use iodides in the presence of phthisis, he had seen it used in so many cases without apparent harm, that he was satisfied its dangers had been greatly exaggerated.

3. The author implies that aneurysm causes "terrific compensatory enlargement of the heart." Dr. Shelton P. Sanford has taken advantage of the unrivaled opportunity for the study of cardiovascularsyphilis among the colored patients at Grady Hospital, and has found that cardiac enlargement is not common in cases of thoracic aneurysm.

However, on the whole the book lives up to its prospectus, and is admirably adapted to the needs of the man in general practice. It was up-to-date at the time of publication, as is evidenced by its mention of bismarsen. It can be read almost at a sitting and probably no one but a professional syphilologist can read it without learning a great deal.

L. M. B.

#### BOOKS RECEIVED

*Symptoms of Visceral Disease. A Study of the Vegetative Nervous System in Its Relationship to Clinical Medicine*, by Francis Marion Pottenger, A.M., M.D., LL.D., F.A.C.P., Medical Director of Pottenger Sanatorium for Diseases of the Lungs and Throat, Monrovia, California; author of "Clinical Tuberculosis," "Tuberculin in Diagnosis and Treatment," "Muscle Spasm and Degeneration." Fourth edition. Contains 426 pages with 87 text illustrations and ten color plates. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Missouri. Price, \$7.50.

*A Text-Book On Orthopedic Surgery*, by Willis C. Campbell, M.D., F.A.C.S., Professor of Orthopedic Surgery, University of Tennessee, College of Medicine, Memphis. Octavo volume of 705 pages, with 507 illustrations. Philadelphia and London: W. B. Saunders Company, 1930. Cloth, \$8.50.

*Treatment of Pernicious Anemia With Swine Stomach* H. Milton Conner, Rochester, Minn., (Journal A. M. A., Feb. 8, 1930), found that raw swine stomach contains a substance which produces, in patients who have pernicious anemia, a rise in the number of erythrocytes and in the proportion of reticulated erythrocytes similar to that produced by liver and liver extract, and by a diet high in vitamins and containing a small amount of liver. He concludes that further work will be necessary to determine whether the material is more or less effective and more or less lasting in its action than liver. Swine stomach has been fed in six cases.



COMMUNICATIONS  
TENNESSEE MEETING

Dr. William R. Dancy, President,  
Medical Association of Georgia,  
Savannah, Georgia.  
Dear Doctor Dancy:

On April 8, 9, 10, 1930, the Tennessee State Medical Association will celebrate in Nashville, the one hundredth anniversary of its organization.

We are endeavoring to plan a program that will be in harmony with the spirit of such an occasion.

On behalf of the Tennessee State Medical Association I am writing to request that your Association send representatives to this meeting. This means also that any members of your society will be welcome to attend. We know there are many doctors in your state who graduated from Nashville and other Tennessee institutions who might be glad to come back. To all of these a hearty welcome is extended.

You are requested to give publicity to this invitation to the end that all your members will know of it.

Cordially yours,

H. H. SHOULDERS, Secretary-Editor,  
Tennessee State Medical Association.

Nashville, Tenn., Jan. 29, 1930.

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*Council Accepted*

To the Editor:

In addition to the articles enumerated in our letter of December 28, the following have been accepted:

Abbott Laboratories.

Butesin Picrate Eye Ointment.

Lakeside Laboratories, Inc.

Ampoules Dextrose (d-Glucose) 10 Gm., 20 cc.

Ampoule No. 51 Sodium Cacodylate 0.243 Gm. (3½ grains), 5 cc.

H. K. Mulford Co.

Pneumococcus Antibody Solution, Types I, II and III Combined-Mulford, four 50 cc., double-ended vials.

The following articles have been exempted and included with the List of Exempted Medicinal Articles (New and Non-official Remedies, 1929, p. 481):

Davies, Rose & Co., Ltd.

Pil. Digitalis (Davies, Rose.)

Kings County Packin gCo.

Sec-A-Rin Brand California Bartlett Pears.

Eac-A-Rin Brand California Tidbits Hawaiian Pineapple.

Sec-A-Rin Brand California Royal Anne Cherries. Lakeside Laboratories, Inc.

Ampoule No. 64 Calcium Chloride 10%.

COUNCIL ON PHARMACY AND CHEMISTRY  
AMERICAN MEDICAL ASSOCIATION.

Chicago, January 24, 1930.

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NEW AND NON-OFFICIAL REMEDIES

Typho-Bacterin Mixed (Triple Vaccine TAB).—This product (New and Non-official Remedies, 1929, p. 380) is also marketed in packages of thirty 1 cc. vials, being ten immunizations of three doses each. H.

K. Mulford Co., Philadelphia. (Jour. A. M. A., January 4, 1930, p. 31.)

Ampules Sodium Cacodylate-Mulford, ¼ grain. 1 cc.—Each ampule contains sodium cacodylate (New and Non-official Remedies, 1929, p. 73) 0.05 Gm. (¾ grain) in 1 cc. of sterile solution, with 1 per cent of benzyl alcohol. H. K. Mulford Co., Philadelphia.

Ampules Sodium Cacodylate-Mulford, 3 grains. 1 cc.—Each ampule contains sodium cacodylate (New and Non-official Remedies, 1929, p. 73) 0.2 Gm. (3 grains) in 1 cc. of sterile solution, with 1 per cent of benzyl alcohol. H. K. Mulford Co., Philadelphia.

Ampules Sodium Cacodylate-Mulford, 5 grains. 1 cc.—Each ampule contains sodium cacodylate (New and Non-official Remedies, 1929, p. 73) 0.32 Gm. (5 grains) in 1 cc. of sterile solution, with 1 per cent of benzyl alcohol. H. K. Mulford Co., Philadelphia.

Erysipelas Streptococcus Antitoxin (Concentrated) Mulford.—This product (New and Non-official Remedies, 1929, p. 349) is also marketed in packages of one 10 cc. syringe containing 500,000 protective units. H. K. Mulford Co., Philadelphia. (Jour. A. M. A., January 11, 1930, p. 105.)

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FELLOWSHIP OF MEDICINE AND POST-GRADUATE MEDICAL ASSOCIATION

To the Editor:

We should be grateful if you would insert this letter in your Journal for the benefit of medical men and women intending to visit England.

We have heard overseas post-graduates complain that London is so large, and so complicated, that it takes a few weeks to learn the way around; they also say that, unless they come armed with letters of introduction to physicians or surgeons, it is difficult to obtain the facilities they require. The Fellowship of Medicine was founded to overcome these difficulties, and overseas post-graduates should, as a matter of course, come direct to the Fellowship where, with-and assistance.

out any charge, they can obtain information, advice

We can—and every day do—save time for overseas post-graduates who apply to us either before leaving their own country or on arrival in England.

Perhaps the main point to be realized is that in England the Medical Year begins in October, and extends through the winter and spring until the end of July, August and September, being the vacation months, opportunities for work are naturally somewhat curtailed, though the Fellowship endeavors to provide facilities for doctors who are only free for study during that time. We would add, however, that for overseas doctors their arrival in England in August or September means acquainted with London before starting work in earnest.

We have been told that the information chiefly desired by overseas practitioners is the dates of the various examinations for degrees and diplomas, and the dates, duration and opportunities for securing resident positions in London Hospitals, as well as the facilities for special courses of instruction. All this in-

formation the Fellowship of Medicine is in a position to provide.

As far as the Fellowship itself is concerned, opportunities for clinical work all the year round are provided in the 40 London hospitals with which it is associated, as well as the special courses shown overleaf, and also weekly (free) lectures during the winter months, and weekly (free) clinical demonstrations (except during August and September). In addition, the Fellowship publishes monthly the "Post Graduate Medical Journal" (6/—per annum post free) containing post-graduate lectures, clinical demonstrations, reports of cases and information on the various courses of instruction. Above all, however, the Fellowship endeavors to help in every way possible medical practitioners requiring advice and assistance, by acting as a central bureau of information, and, of course, no charge is made for this service.

All inquiries should be addressed to the Secretary, Fellowship of Medicine, 1, Mimpole Street, London, W. 1.

H. W. CARSON, M. D.,  
Chairman of Executive Committee.

September 12, 1929.  
1, Wampole Street,  
London, W. I.

#### NEWS ITEMS

The Jefferson County Medical Society met on December 6th. Officers for 1930 were elected and installed. Dr. Eugene E. Murphey, Augusta, delivered an address on "The Relation of the Public Health Officer to the Regular Physician." Other speakers on the program were: Dr. R. L. Miller, Waynesboro, and Dr. Cleveland, Tompson, Millen.

The Troup County Medical Society met at the Colonial Hotel, LaGrange, on January 9th. Officers were elected for the ensuing year. Dr. Henry R. Slack, LaGrange, read a paper on the Life and Work of General William Crawford Gorgas. Dr. Franklin J. Amis, Hogansville, read an interesting scientific paper.

Dr. Francis Carter Wood, New York City, delivered an address before the Richmond County Medical Society, Augusta, Thursday evening, January 2nd on General Aspects of Malignancy.

Dr. Hugh N. Page announces the removal of his office to suite 512 Southern Finance Corporation Building, Augusta.

Dr. W. P. Few, President of Duke University School of Medicine, Durham, North Carolina, announces that the General Education Board of New York has authorized grants aggregating three hundred thousand dollars and running through a period of five years. The school will open on October 1st. Already sixty-seven professors, lecturers, instructors, and others in varying capacities, covering the entire field of medical science, have been secured. The new school of medicine will admit first and third year students, chosen on a rigidly selective basis.

The Twelfth District Medical Society held its semi-annual meeting at Eastman on January 8th. Titles of papers on the scientific program were as follows: Surgical Treatment of Thoracic Diseases by Dr. Dan Elkin, Atlanta; Acute Dermatitis by Dr. Cosby Swanson, Atlanta; Building a Formula by Dr. R. T. Dorsey, Atlanta; Suprapubic Prostatectomy Under Local Anesthesia—illustrated by Dr. E. G. Ballenger, Atlanta; Nervous Women—The Results of Uterine Displacement and Relaxed Perineal Outlet by Dr. A. R. Rozar, Macon; Value of Multiple Stage Measures in Surgery by Dr. Ben H. Clifton, Atlanta; Address by Dr. William R. Dancy, President of the Association, on Health/Education Week and Medical Relief in Disaster; Address by Dr. Joe P. Bowdoin, Director of County Health Work, on Health Education Week. The Oculge Medical Society was host and entertained the members and visitors at a banquet given at the Leeland Hotel at 7:30 P. M.

Dr. O. L. Rogers, Sandersville, formerly on the staff of the Rawlings sanitarium, is taking a six weeks training course in health work in Mississippi. He has been elected commissioner of health for Washington County and will assume his duties as such on his return.

Dr. H. B. Jenkins, former health officer for Washington County, has removed to Thomasville.

The Clarke County Medical Society met at the Holman Hotel on January 7th. Officers were elected and installed for the year. The society has mapped out a progressive program for 1930. Clinics will be given and scientific papers read at each monthly meeting. Dr. H. M. Fullilove was host to the members at its February meeting held at St. Mary's Hospital. He conducted a clinic and read a paper on Fractures.

Dr. Lon W. Grove, Atlanta, has been appointed medical director for the Southern Bell Telephone and Telegraph Company. The company conducts classes in which its employees are trained in the prevention illness and first aid. The classes will be under Dr. Grove's general supervision.

The Crisp County Medical Society met in the offices of Doctors M. R. Smith and A. J. Whelchel, Cordele, on January 7th. Officers were elected for the ensuing year.

Dr. Thomas H. Smith, Valdosta, was host to the members of the Lowndes County Medical Society at a luncheon given at the Valdes Hotel on January 10th.

The Turner County Medical Society met at Ashburn on January 8th. Officers were elected for the year. Social and scientific meetings will be held monthly during the year.

The officers on the Section of Urology of the American Medical Association have authorized a section exhibit in the scientific exhibit for the Detroit Session on the subject of Cancer of the Bladder. The material which is especially desired may be classified

as follows: (a) Unusual roentgenograms showing bone metastases from cancer of the bladder; (b) Gross preparations of bladder tumors; (c) Microscopic preparations of bladder tumors; (d) Experimental work bearing on electrocoagulation and the action of radium and roentgen ray; (e) Apparatus for applying these therapeutic measures to the treatment of cancer of the bladder; (f) Statistical data concerning the incidence of bladder tumor. Applications should be filed not later than March 1, 1930, with Dr. George Gilbert Smith, 6 Commonwealth Avenue, Boston, Massachusetts.

Dr. S. Ross Brown announces the removal of his office to suite 205 Medical Arts Building, Atlanta.

Dr. James F. Pitman, formerly of Thomasville, announces the removal of his office to 157 Ponce de Leon Apartment, Decatur.

The annual meeting of the Atlanta Academy of Ophthalmology and Oto-Laryngology was held on Jan. 23, 1930. The following officers were elected for the coming year. Dr. Leon Brawner, President; Dr. William L. McDougall, Vice-President, and Dr. William O. Martin, Secretary and Treasurer. Dr. F. P. Calhoun presented a case of Glaucoma Simplex occurring in a boy 12 years of age. This is the fourth generation which has come under his care and in each generation has the condition been seen earlier. In all there have been 13 cases of Glaucoma Simplex seen in this family. This is the largest series of such cases ever reported. Dr. Willensky presented a most interesting case of Papillitis which may be due to diabetes. Of interest in this case are some neurological changes including a left Lateral Homonymous-hemianopsia.

Dr. Kenneth S. Hunt announces the completion and opening of the R. F. Strickland and Son Memorial Hospital, Griffin.

The Randolph County Medical Society held its annual clinic at the Patterson Hospital, Cuthbert, Thursday, February 6th. Doctors from the Medical Department of the University of Georgia were in charge of the work.

Dr. Katherine R. Collins, formerly on the staff of the General Hospital, Spartanburg, South Carolina, has returned to Turnerville and opened offices for the practice of medicine.

Dr. Eugene E. Murphey, Augusta, was elected president of the Georgia Public Health Association at its meeting held at the offices of the State Board of Health, Atlanta, on January 25th. Dr. B. V. Elmore, Rome, was elected Vice-President; Dr. V. H. Bassett, Savannah, Secretary-Treasurer. Dr. W. S. Leathers, Dean of the Vanderbilt University School of Medicine, Nashville, Tennessee, delivered an address and urged the establishment of a Department of Public Health at the University of Georgia Medical Department, Augusta; Dr. Geo. E. Atwood, Waycross, read a paper on Pasteurization of Milk for the Prevention of Disease;

Dr. Frank C. Story, Jesup, read a paper on the Prevention of Diphtheria. The next meeting of the Association will be held at Augusta during the annual session of the Medical Association of Georgia on May 14, 15, 16.

Dr. Earl T. Newsom, formerly of Florence, Alabama, has returned to Union Point and opened offices for the practice of medicine.

Dr. H. T. Harriss, Washington, delivered an address on Health Education Week before the Parent-Teacher Association in Washington on January 14th. The Parent-Teacher Association voted unanimously to assist and cooperate with the physicians of Wilkes county in making Health Education Week a success.

Dr. L. S. Osborne, Fitzgerald, celebrated his seventy-fifth birthday and entertained the members of the Ben Hill County Medical Society at his home on Roanoke Drive on January 10th. A delightful three course dinner was served.

Dr. Andrew D. Williams, Lawrenceville, was elected county physician for Gwinnett at a recent meeting of the commissioners.

The Gwinnett County Medical Society met in the offices of Dr. Frank Moore, Buford, on January 14th. Dr. J. S. Cochran, Norcross, gave a Case Report. The next meeting of the society will be held at Lawrenceville. Committee was appointed to write scientific papers to be read and discussed.

Mitchell County Medical Society met at Camilla on January 17th. Officers were elected for the year.

Dr. B. O. Quillian, formerly of Willacoochee, has removed to McRae and opened offices for the practice of medicine.

## AUGUSTA

(Continued from Page 70)

The capacity for building brick alone is 175,000,000 annually and for hollow tile 50,000 tons annually.

In the immediate vicinity of Augusta more than five million feet of gum and miscellaneous hard woods are produced annually.

Here are three wholesale lumber plants, four mill work plants, one veneer plant, one press cloth mill, eight cottonseed oil mills, seven fertilizer plants, five companies mining kaolin within a few miles of Augusta producing approximately 200,000 tons annually.

Some of the other products manufactured in Augusta are machinery and mill supplies, candy, bedding, food products, flour, and bakery products.



## OBITUARY

*Dr. Joseph O. Kinard*, Member, Atlanta; Atlanta College of Physicians and Surgeons, 1905; aged 52; died at his camp near Chamblee on December 31, 1929. He had been very successful in the practice of surgery. Dr. Kinard was a member of the Shrine, the Fulton County Medical Society and the American Medical Association. Surviving him are his widow and two daughters, Misses Elizabeth and Evelyn Kinard. Funeral services were conducted by Rev. Wade Boggs from Spring Hill church and interment in West View cemetery.

*Dr. George W. De La Perriere*, Winder; Southern Medical College, Atlanta, 1882; aged 72; died at a private hospital on January 5, 1930. He was a leading physician of Winder and Barrow county for many years. Dr. De La Perriere took an active interest in civic affairs and was interested in the large business institutions of Winder. He was a member of the board of directors of the Winder National Bank and vice-president of the Barrow County Cotton Mills. Surviving him are his widow; two sons, Dr. C. N. and Dr. E. E. De La Perriere; and one daughter, Mrs. H. H. Sigards. Funeral services were conducted by Rev. John Wood from the First Methodist church and interment in Rosehill cemetery.

*Dr. J. T. Snider*, Gibson; Emory University School of Medicine, 1896; aged 58; died at a private sanitarium in Sandersville on January 1, 1930. He was held in high esteem by all the people who knew him and did an immense amount of charity practice. Dr. Snider was a member of the board of education of Glascock county, Masonic lodge and the Methodist church. Surviving him are his widow and three daughters, Misses Edith, Evelyn and Ione Snider.

*Dr. John Bonar White*, Atlanta; Member; Johns Hopkins University School of Medicine, Baltimore, Maryland, 1917; aged 40; died at his home, 769 Penn Avenue, on January 23, 1930. He was physician for the Georgia School of Technology; member of the staff of the Davis-Fischer Sanatorium and the Georgia Baptist Hospital, Atlanta. Dr. White had taken post-graduate courses at Johns Hopkins University School of Medicine; University of Illinois College of Medicine, Chicago; University of Virginia Department of Medicine, Charlottesville; and at institutions in New York. He was a member of the Fulton County Medical Society, American Medical Association, Gate City Lodge F. & A. M., American Legion, Yaarab Temple, Knights Templar and the Presbyterian Church. Surviving him are his widow, mother, one sister, Mrs. Chas. A. Milford, Abbeville, South Carolina; three brothers, T. G. and W. H. White, Abbeville, S. C., and A. W. White, Charlotte, S. C. Funeral services were conducted by Rev. Edgar Kerr from Spring Hill Church and the body removed to Abbeville, South Carolina, for interment.

*Dr. F. M. Gordy*, Cusseta; College of Physicians and Surgeons, Baltimore, Maryland, 1881; aged 74; died at his home on January 1, 1930, after a long illness. He was born in Stewart county. Dr. Gordy was ordinary of Chattahoochee county at the time of his death. Surviving him are his widow, one daughter, Mrs. Laura Bowdon; one step-daughter, Mrs. M. J. Pharr, Macon; four sons, C. L. Gordy, Shamrock, Florida; J. S. Gordy, St. Petersburg, Florida; M. A. Gordy, Atlanta, and J. Frank Gordy, Mobile, Alabama. Funeral services were conducted from Mill Creek Church by Rev. Walker, pastor of the Methodist Church at Mitchell. Interment was in the church yard at Mill Creek.

## RESOLUTION

Mrs. J. J. C. Wright, Wife of Dr. Wright, Doerun:

Be it resolved: That we the members of the Colquitt County Medical Society, deeply deplore the untimely death of the beloved wife of Dr. J. J. C. Wright, and sympathize with him in his great loss.

Resolved: That a copy of these resolutions be incorporated in the minutes of this society. A copy sent to Dr. J. J. C. Wright, President of the Colquitt County Medical Society. Also a copy be sent the Journal of the Medical Association of Georgia.

Respectfully submitted,

COLQUITT COUNTY MEDICAL SOCIETY.

Committee

E. L. LAWSON, M.D.

J. E. LANIER, M.D.

T. H. CHESTNUTT, M.D.

## THE BACTERIOLOGY OF INFANT DIET MATERIALS

It is not generally realized, the extent to which Mead Johnson & Company carry their research.

Efficient and systematic as are the research activities carried on for years in their own laboratories, this progressive house is constantly adding fellowships at leading universities and other institutions.

One of these has recently corroborated\* a fact of great importance to all who feed infants: No Mead Product contains hemolytic streptococci or other pathogenic bacteria.

This significance to pediatricians of this brief statement lies in the fact that the presence of homolytic streptococcus has been suspected in infant diet products, its relationship to scarlet fever, septic sore throat, enteritis, etc., naturally being a source of alarm.

It is reassuring to all physicians to know that not only have Mead Products never been under suspicion but that from authoritative unbiased sources comes additional proof that as a result of careful technic and long experience. Mead Products are bacteriologically clean and safe to prescribe: Dextri-Maltose, Reolac, Casec, Lactic Acid Milk, Powdered Protein Milk.

\*New York State Agricultural Experiment Station Bulletin Nos. 153 and 154.

## THE PHYSICIAN'S OBLIGATION

Stanley H. Osborn, Hartford, Conn. (Journal A. M.A., Oct. 26, 1929), asserts that the private physician is the only person who can approach the proposition of public health from a personal and individual standpoint. He may well be called the private in the war on preventable diseases. Each physician in the country may well ask himself the question, "Am I doing what I should for the health of my patients in the communities in which I practice medicine?" Physicians not only should be wide awake to the latest developments in the prevention of disease but should most actively and energetically in private practice seek to do the best they know how for their patients and families. It matters not whether we are in a department of health, in a voluntary health group or private practitioners, when we consider the prevention of disease. Preventive medicine should be foremost in our minds, because it is often the most valuable merchandise the physician can give his patient. Preventive medicine must necessarily be carried out in a more energetic and positive manner than curative medicine. A well person must have the several measures of preventive medicine brought forcibly to his attention before he will even become interested in the proposition. This the family physician should do. He must do it if he is giving all he can for the health of his patients. It is his duty in this age to foster actively the carrying out of prophylactic measures in the families of his patients, including such measures as the placing of silver nitrate in the eyes of the new-born, immunization against diphtheria and smallpox, immunization against typhoid and paratyphoid when advisable, and periodic physical examination of adults and children at regular intervals. Other measures that may depend on the local environment, such as the prevention of rickets and goiter, are certainly

preventive measures that the conscientious physician cannot neglect. As to the second item—the duty of the physician to the community—should he remain strictly aloof and tend to his knitting? He most certainly should not. Not only the physician but the medical societies should be actively interested in these community affairs.

COUNTY SOCIETIES REPORTING  
FOR 1930

(Continued From Page 74)

## MITCHELL COUNTY MEDICAL SOCIETY

Mitchell County Medical Society announces the following officers for 1930:

President—C. L. Roles, Camilla.

Vice-President—B. Williams, Pelham.

Secretary-Treasurer—C. A. Stevenson, Camilla.

## TALBOT COUNTY MEDICAL SOCIETY

Talbot County Medical Society announces the following officers for 1930:

President—J. E. Peeler, Woodland.

Vice-President—W. P. Leonard, Talbotton.

Secretary-Treasurer—C. C. Carson, Talbotton.

Delegate—G. L. Carter, Talbotton.

## DRUG ADDICTS

Drug and Alcoholic patients are humanely and successfully treated in Glenwood Par Sanitarium, Greensboro, N. C.; reprints of articles mailed upon request. Address W. C. Ashworth, M.D., Owner, Greensboro, N. C.

**WANTED:** Position as office nurse, by graduate of accredited training school. Experienced stenographer and typist. Address L. G., in care of this Journal.

No Starch




**Listers**  
CASEIN-PALMUT

## Dietetic Flour

Starch-free Diabetic Foods that are appetizing are easily made in the patient's home from Listers Flour. It is self-rising. Ask for nearest depot or order direct.

LISTER BROS. Inc., 41 East 42nd St., NEW YORK



(HART)

See Description, Journal A.M.A.  
Volume XLVII, Page 1488.

A scientific combination of Bismuth Subcarbonate and Hydrate suspended in water. Each fluidrachm contains 2½ grains of the combined salts in an extremely fine state of subdivision.

**MEDICINAL PROPERTIES:** Gastric Sedative, Antiseptic, Mild Astringent and Antacid.

**INDICATIONS:** In Gastro-Intestinal Diseases, Diarrhoea, Dysentery, Cholera-Infantum, etc. Also suitable for external use in cases of ulcers, etc.

**E. J. HART & CO., Ltd.**  
Mfg. Chemists  
New Orleans

# THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

DEVOTED TO THE WELFARE OF THE MEDICAL PROFESSION OF GEORGIA  
PUBLISHED MONTHLY under direction of the Council

Volume XIX

March, 1930

No. 3

## PREPARATION OF MEDICAL PAPERS\*

L. MINOR BLACKFORD, M. D.  
*Atlanta*

It has been said that the best edited medical magazine in the world is the *Journal of the American Medical Association*. It serves as a model for the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA. The editors of the JOURNAL are relatively handicapped as to time and clerical assistance, but they have a guide, "The Art and Practice of Medical Writing." This book, by George H. Simmons and Morris Fishbein, published by the American Medical Association, should be carefully studied by each physician who desires to present or publish a paper. It has provided most of the material for this article, and it will be freely quoted.

### SUBJECT MATTER

Enthusiasm on the part of its author is the first requirement of a good paper. When a paper is prepared merely because the writer feels that he should burst into print, it is obvious.

The purpose of this JOURNAL is to benefit the general practitioner. Extensive reviews of a subject, such as may be found in a system of medicine or in a textbook, are not desired. They have their place in meetings of county and district societies: they serve to open discussion and to refresh the memories of their hearers as well as of their authors. Papers by specialists which are of interest only to others in the same field do not belong in these columns, and yet developments in the specialties should be made known to the profession at large. Reports of highly refined research might better appear in periodicals devoted to such literature.

\*Prepared at the request of the Editor and of the Committee on Publications.

Reports of interesting or unusual cases, especially with necropsy, personal experiences with newer methods of therapy, personal observations of new or unappreciated clinical facts, and original observations in pathology should constitute the greater part of the material. Crawford W. Long and James Mackenzie were general practitioners who could have enriched the pages of any journal with their original observations. And Dr. Long himself would have benefited from prompt publication of his experience with ether.

Essays, such as presidential addresses or discussions of the general problems of physicians, are also welcomed. The requirement of manuscripts of this type is that they shall be interesting.

### STYLE

"A good style is direct, plain and simple. . . . A florid, roseate style, full of polysyllabic, metaphorical phraseology, distracts the reader's attention. . . . Deletions of unnecessary words always improve grammatical construction and style of expression, and make reading with understanding easy."

In the "comment" on a case report submitted recently there occurred the phrases, "It is to be emphasized that—", "It is worthy of note that—", and "It should be noted that—". The recognized purpose of a "comment" is to emphasize noteworthy points: all three phrases were accordingly deleted.

"Case No. A8765. Miss A., of —, referred to me by Dr. M. S., of —, aged 36, female, single, white, admitted to the Smith Hospital at —, was seen by me Nov. 6, 1922, suffering with abdominal pain in the right hypochondriac region. She was a poorly nourished woman and suffering great shock and presented all the symptoms of intestinal obstruction." was appropriately changed to read,

"Miss A., aged 36, was seen Nov. 6, 1922, suffering with pain in the right hypochondriac region, apparently due to intestinal obstruction."

Here is another specimen:



"I do not hesitate to say that in my opinion the gland in this case should not have been removed."

"The first seven words are space takers; the author makes his statement, and the reader cares not whether he hesitated or did not hesitate in making it."

#### TECHNIC OF THE CASE REPORT

"A case report should tell its story in clear, straightforward, narrative style. . . . It should not be copied exactly from original records hastily jotted down at the time the various events occurred. . . . Unimportant findings or those which have no bearing on the clinical history of the case should be avoided. . . . The elimination from a case report of all negative material is a valuable exercise from the standpoint not only of good English composition but also of scientific knowledge."

Pertinent negative data may sometimes be retained for emphasis, but in reporting a case of fracture of the femur it is unnecessary to say that ophthalmologic examination was negative. If, for some reason, description of the fundus is required, give it, but do not precede this with "on ophthalmoscopic examination," because without such an examination it would be impossible to describe the appearance of the retina.

Unless the purpose of the paper is to emphasize certain points in surgical technic, all the details of the operation should be left out. If, for example, the author merely wishes to state that the gallbladder was removed, he bores his readers by describing the pre-operative preparation of the patient, the exact time that the anesthetic was started, the anesthetic employed, the hour of return of consciousness, the methods and materials used in suturing and especially that the edges of the incision through the skin were approximated. Gross description of the gallbladder and of the neighboring organs would, however, be appropriate.

Tenses should be consistent and every sentence should contain a verb. Abbreviations are rarely permissible.

#### CONSTRUCTION

The title is of more importance than the average medical writer realizes. Titles such as "An Unusual Case" are worse than useless. "Basal Pathology" might have to do

with disease at the base of the brain, at the base of the heart, at the bases of the lungs,—or perhaps even with hemorrhoids.

The ideal title expresses in a few words the theme of the paper. "Hyperthyroidism Masked as Heart Disease" was ideal; a less skillful writer might have entitled that paper, "The Importance of Always Excluding Hyperthyroidism in the Case of a Patient Presenting Symptoms of Congestive Failure of the Myocardium, with Report of Seven Cases of Atypical Goiter in Which Relief Followed Partial Thyroidectomy." If it is impossible to express the theme in less than ten words, a subtitle may be added. A good title insures proper indexing.

"Subheadings break up solid pages of type and enable the reader to find the especial points in which he is most interested." They also facilitate logical and orderly presentation.

"The summary, a brief abstract of the article, usually at the end, is greatly appreciated by the average physician. The busy doctor often reads the summary first to determine whether he shall read the whole paper." A good summary is often reprinted in other journals. It also serves to prevent misquotation.

#### WORDS

The use of the simplest possible words marks the master of composition. Contrast the prose of the New Testament with that of the full-page advertisements in the Sunday newspaper.

In a recently received manuscript, "I", "we" and "one" all apparently referred to the author. In a single paragraph another spoke of a hypothetical man as "your patient" and "our patient" indiscriminately. Consistency must obtain.

If the writer wishes to refer to himself, by all means let him say "I", "me" and "my." This is the clearest and most satisfactory usage. If he says "we", he should be explicit as to who is included by the pronoun, unless there is an associate author. A few years ago a well-known authority wrote of a certain disease, "The 247 cases assembled here are very probably not far from the total number ever reported." A few months later a younger student of the same disease

said, "I have been able to assemble 359 cases."—and he overlooked at least six. The first author did not say "I", but implied that he had said the last word on the subject. The second author was really more modest, as well as more accurate; he would only have weakened the result of his work by interpolating, "although I am not an authority on this subject."

Thorough knowledge of a subject sometimes tends to make a physician almost too conservative in his statements. A layman recently asked a urologist of great experience if it were possible for an adult to contract gonorrhea in other than the usual way. He replied, "I can only say that I have never seen such a case in the male."

The word "very" never helps in scientific writing. "Marked" and "pronounced" are hackneyed. "Physical examination revealed," "the microscope showed," "significant observations," "negative findings," "points out," "the fact that," "throws light upon," and "interesting and instructive" are almost worn out. "Definite" is unnecessary: unless he qualifies it, it is assumed that the author is sure of what he says. It is better to say, "cardiac dulness extends 13 cm. to the left," than, "the heart is definitely enlarged to the left." Although the heart is often normal, it cannot be "negative." The result of an examination or specific test may be correctly reported "negative." Size must be expressed by measurements, only estimated ones if necessary, but never as "about the size of an orange."

Slang and medical jargon have no place in a professional journal.

"Syphilitic" must not be used for "syphilitic patient", nor "cardiac" for "patient with cardiac disease." "Case" must not be used for "patient", nor "cure" for "treatment." "Tubercular" means "nodular"; "tuberculous" means "infected with the bacillus of tuberculosis."

"Function" is both noun and verb; "functionate" is bad. "Dilatation" is sanctioned, but is hardly an improvement on "dilation." "Cystoscope" is a noun and must not be used as any other part of speech. "Heart" and "stomach" are also nouns, but homely

phrases such as "heart disease" and "stomach trouble" are perhaps permissible. It is necessary, however, to say "cardiac arrhythmia" and "gastric carcinoma." It is possible to "operate a cotton-gin," but it is not possible to "operate a patient"—nor his appendix. "Acute appendicitis" is common, but an appendix cannot be "acute." "Acute abdomen" is beyond the pale.

"Pathology" means the "science of disease"; it is therefore absurd to speak of "pathology in the right lung." It is correct to speak of "the symptomatology of peptic ulcer", but the person so afflicted suffers the "symptoms of peptic ulcer." "Serology" is also a science. "Positive serology" is the worst type of jargon: apparently, "positive Wassermann reaction" is usually meant, but it would be equally logical to interpret it to mean that a test of the serum was positive for typhoid or undulant fever, Brill's disease or tularemia. "Serum" and "vaccine" are too often used interchangeably. "Specific" and "luetetic" are convenient to obscure meaning from the patient's relatives, but "syphilitic" is better in writing for the medical profession.

It is incorrect to say the patient had "no temperature." One may say that there was "no elevation of temperature," but it is shorter to say there was "no fever."

"X-ray" is anathema to Dr. Fishbein. "roentgen ray," "roentgenogram" and "fluoroscopic examination" are required. "Autopsy" is etymologically incorrect and has been declared archaic: "necropsy" is substituted.

"Shot" is perhaps the most abused and overworked word in medical literature. Shot is of lead. Physicians in familiar conversation will probably continue to speak of "shots" of everything from insulin to "606", but the word is not accepted by good medical journals. "Arsphenamine" and "neoarsphenamine" are correct; "606," "salvarsan" and "neo" are not allowed.

Names of proprietary preparations must not be used unless the author wishes to stress that particular brand. For example, "epinephrine" is the correct term for extract of the suprarenal medulla, and "adrenalin" is the trade-name of epinephrine prepared by Parke,

Davis & Co.; and "puitrin" of their pituitary extract. "Luminal" is the Winthrop brand of phenobarbital.

### SPELLING

It is extraordinary how careless some physicians are in spelling. Bad spelling is unpardonable, so a good dictionary is indispensable. Often, however, authority may be found for more than one way of spelling a word. Here again consistency must obtain, so the *Journal* authorizes only one spelling.

A few words frequently misspelled are therefore given:

anesthesia	fulfil
benefited	gallbladder
calory	gallstone
cigaret	hiccup
combated	intern
curet	per cent (never %)
disk	technic
dulness	

Another point on which emphasis is laid is the omission of the final "al" in every possible adjective, such as "analytic," "etiologic," "neurologic," and "roentgenologic." "Chemical," "clinical," "medical," "surgical," and "theoretical" cannot be shortened. The adverb is formed from the old form, as "analytically."

As a general rule, the plural of medical terms is formed by adding "s", as "epitheliomas", but one must still say:

bacilli	foci
bacteria	nuclei
bronchi	sequelae
data	vertebrae
emboli	

Some words have two plurals; for example, "amebas" and "*Amoebae dysenteriae*." The second form is still considered Latin.

### ABBREVIATIONS

Abbreviate Jan., Feb., Aug., Sept., Oct., Nov., and Dec. when day and year are both given (Feb. 18, 1930). When month and day only are expressed, or month and year only, spell out the month: February 18 and February, 1930 (but on the 15th of the month). In case of doubt do not abbreviate.

The abbreviations illustrated below are used after numerals:

10 a. m.	in the forenoon
72½ in.	several inches
2.5 cc.	several cubic centimeters
56.7 Kg.	many Kilograms
10 mg.	several milligrams
120 mm. Hg	a few millimeters of mercury
5 Gm.	some grams

A period is not placed after the symbol of an element. Note that in using the metric system, decimal fractions must be used. Two and a half per cent must be written "2.5 per cent." Numbers that begin a sentence must be written out, and numbers less than 100 are often written out. In matter to be set up in smaller type, as in the actual case report, numbers may be expressed in figures. In an essay one should write "three thousand physicians," but "2,897 deaths."

In writing prescriptions the names of the drugs and instructions for use must be written out in full. It is best to express the amounts in both the old and the metric systems.

### BIBLIOGRAPHY

In some respects no part of a paper is more important than the bibliography. It should be a point of honor for the medical author not to list a reference that he has not personally consulted. He may say, "According to White, Black says that—" when he has not read Black's article provided he gives the reference to White's paper that he has read. The internal evidence that the works cited have been studied and the accuracy of the references carry great weight in the acceptance of a paper.

This JOURNAL does not want extensive bibliographies. For the class of material desired, more than ten references are usually superfluous, and rarely are as many as thirty appropriate. "To republish long bibliographies taken from other authors is a form of plagiarism."

A complete reference to a book contains the following information:

1. Author's surname and initials. If he has only one initial, the first name should be given if possible.
2. Title of the book. This must not be abbreviated.
3. Volume, if more than one have been published.
4. Edition, if more than one have been published.
5. Place of publication.
6. Name of the publishers.



7. Year of publication.

8. Page.

A complete reference to an article in a periodical contains:

1. Author's surname and initials, or first name.

2. Title of the article.

3. Name of the periodical, properly abbreviated.

4. Volume.

5. Page. It is well to give also the last page.

6. Month. If the periodical is published more often than once a month, the day of the month is necessary.

7. Year.

Punctuation and capitalization should be exactly as given in the following examples:

1. Abbott, M. E.: Coarctation of the Aorta, in Osler and McCrae, *Modern Medicine*, ed. 3, Philadelphia, Lea & Febiger, 1927, vol. 4, p. 772.

2. Reid, W. D.: The Heart in Modern Practice, Philadelphia, J. B. Lippincott Company, 1923, p. 426.

3. Cardiac Asthma, Editorial, J. M. A. Georgia 19:32 (Jan.) 1930.

4. Conner, L. A.: The Psychic Factors in Cardiac Disorders, J. A. M. A. 94: 448 (Feb. 15) 1930.

5. Willius, F. A.: Personal communication to the author.

6. Smithson, John: Experimental Studies in the Etiology of Rheumatic Fever (to be published).

It is desired that the number of the reference be placed in the space above the first mention of it. If necessary to cite the same reference again the number may be repeated. The bibliography should be on a separate sheet at the end.

It is essential that the names of journals be consistently abbreviated. It is easy to determine the official abbreviations of the principal periodicals by consulting the footnotes in the *Journal of the American Medical Association*. Here are some of the more common ones:

1. **Am. Heart J.**, American Heart Journal.

2. **Am. J. M. Sc.**, American Journal of the Medical Sciences.

3. **Am. J. Surg.**, American Journal of Surgery.

4. **Am. J. Syph.**, American Journal of Syphilis.

5. **Ann. Surg.**, Annals of Surgery.

6. **Arch. Dermat. & Syph.**, Archives of Dermatology and Syphilology.

7. **Arch. Int. Med.**, Archives of Internal Medicine.

8. **J. A. M. A.**, Journal of the American Medical Association.

9. **J. M. A. Georgia**, Journal of the Medical Association of Georgia.

10. **South. M. J.**, Southern Medical Journal.

11. **S. Clin. N. Amer.**, Surgical Clinics of North America.

12. **Surg. Gynec. Obst.**, Surgery, Gynecology and Obstetrics, with International Abstract of Surgery.

Certain periodicals other than the *Journal of the American Medical Association* and this JOURNAL use different abbreviations, and arrange the details of bibliography in a somewhat different manner. When sending a manuscript to such a magazine, it is advisable to make the bibliography conform to its standards.

#### PREPARATION OF THE MANUSCRIPT

"It is unwise to ignore that the general appearance of a manuscript has a psychologic effect on the editor. . . . Slovenliness has caused the return of many manuscripts."

Manuscripts should be typed on the standard size of paper adapted to the ordinary typewriter, that is 8 or 8½ by 11 inches. "It is recommended that each contributor keep a carbon copy of manuscript submitted and study the changes made by the editorial board."

A carbon copy or a paper that is typed in single, that is, in close, space will be returned without consideration.

The title on the first page should be placed three inches from the top to allow for notes to the printer. At the top of each succeeding page should be the title, shortened if necessary, the author's name, and the page number. A margin of one inch should be left at each side.

Sloppy manuscript suggests that the whole work is equally sloppy.

#### ILLUSTRATIONS

The first requirement of an illustration is that it should illustrate. The JOURNAL would welcome more illustrations. Superfluous detail should be omitted and the background bring out the object of the illustration without attracting attention itself.

Charts should be as simple, as clear, and as neat as possible. Irrelevant and unimportant data must be left out.

#### REVISION

It has been said that when the average physician writes a paper, he gets out a textbook and perhaps some journals and takes a night off. The following morning he has his secretary type his evening's work and append a copy of his original records of one or more cases. He may deliver this paper with enough personality to delight a friendly audience,

but the same paper will look bad in print. Of the papers that are prepared to deliver, few should be submitted for publication without extensive alteration and repeated revision. On the other hand, a paper that is carefully prepared for publication is, if not too long, an excellent one to read before a scientific gathering.

Osler would jot down notes on scraps of paper over a period of time. After looking up the necessary references, he would collect his notes and elaborate an article from them. He would revise this three or four times. After laying it aside for several weeks he would go over it carefully for a final revision. The finished product would be a classic. Even those of his writings which have become out of date in some respects are still a delight to read. From study of his methods, as well as of those of other masters of prose, both lay and scientific, it may be concluded that the chief factor in successful authorship is hard work.

#### CONCLUSION

This JOURNAL has been improving steadily over a number of years. At the recent convention of medical editors in Chicago it was learned that the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA now ranks with the better State Journals of the United States. With the energetic help of the physicians of Georgia, it should equal the best.

### DELAY IN DIAGNOSIS OF PULMONARY TUBERCULOSIS

EDSON W. GLIDDEN,\* M. D.

Alto

Struck by the advanced type of pulmonary tuberculosis in patients received at the State Tuberculosis Sanatorium during the past five years, and, having heard on several occasions from sanatorium specialists that the doctors were to blame in most cases for late diagnosis, it occurred to the writer to study the charts of some fifty patients received at the sanatorium during 1929, with the idea of finding where the responsibility for late

diagnosis really lies. It has been claimed that carelessness in physical examination, lack of conception of the frequency of tuberculosis, and failure to use such diagnostic aids as the State Board of Health Laboratories has resulted in late diagnosis.

This study shows another cause in the advancement of the disease before the patient reaches the sanatorium; namely, a long waiting period after application is filed by the doctor. This latter is unavoidable, under present conditions, and serves to emphasize the need of a larger number of beds in specialized institutions for tuberculous patients. No attempt has been made to select cases, these charts having been taken from the record file at random. The first reason found for the advancement of the disease is the careless attitude of the patient, putting off consultation with a physician, satisfied with the thought that he has only asthma, some bronchial affection, a bad cold or some other such soothing-syrup self diagnosis. Dependence upon patent medicines, nostrums, counter prescribing druggists, and village wiseacres is to blame in some cases. Also there is the fallacious attitude that "Tuberculosis can't occur in my family. It never has."

Only a few case histories will be quoted in this article to illustrate points made from the review of fifty cases:

*Case 2903.*—A married man of 48 years began having cough, weakness and loss of weight in October, 1923. He diagnosed his condition as "flu", but did not consult a doctor until a month or so later when patent medicines had done no good. The doctor examined his chest and "insinuated weak lungs", advising the patient to return in ten days or two weeks for re-examination. The patient did not take much stock in the insinuation so did not return for examination. However, in March, 1929, a similar attack occurred (there having been several minor attacks in the interim). This doctor examined the chest and sputum, and x-rayed the patient, making a definite diagnosis of bilateral tuberculosis five and a half years after onset of initial symptom complex. The doctor cannot be blamed for this advancement; the responsibility is squarely upon the patient who refused to believe. The patient now says if he had listened in 1923 he "would have been O. K. now." His appli-

\*Superintendent and Medical Director, State Tuberculosis Sanatorium, Alto, Georgia.

cation for admission to the sanatorium was made immediately by the second doctor, but owing to the paucity of beds he had a period on the waiting list of three and a half months.

In our records this story is repeatedly seen; usually, however, the patient does not shoulder the blame, but berates the physician for not "telling him plain." This, it must be admitted, is often the case; the doctor through mistaken sympathy fails to inform the patient of facts, and trusts too much to the patient's understanding a veiled diagnosis.

A story of a slightly different type in which the blame rests upon professional shoulders, as well as those of the patient, is typified by the following case:

*Case 2724.*—A married man of 28 years began having fatigue, cough, dyspnea, and loss of weight six years ago, but delayed consultation with a physician twelve months, so that five years ago he consulted a doctor, whose diagnosis after one year of this sort of symptom complex was asthma and bronchitis, made without physical examination, sputum test, or x-ray. With this salve to his fears, the patient worried along feeling safe in this medical wisdom until he himself, by reason of temperature, chest pains and night sweats, began to doubt the Solomonic utterances of this medical man and sought advice of a chest specialist two years ago. He examined the man's chest and sputum and made diagnosis of far-advanced bilateral pulmonary tuberculosis. Still the patient refused hospitalization until April, 1929, six years after the demonstrable onset of the disease. He was admitted to the sanatorium within thirty days after application was made. But the advancement had already occurred and much lung tissue was destroyed. This case illustrates primarily the carelessness of the doctor, procrastination of the patient, and later inability to believe "that this could happen to me."

*Case 2806.*—A 37-year-old man began to cough and lose weight eight months ago. He had a hemorrhage seven months ago, but failed to report to the doctor for three months after the hemorrhage. (This was a case living in a large city.) When he did consult a physician he selected a specialist in chest diseases, who examined and x-rayed his chest but did not apparently examine sputum. He was told he had tuberculosis, but did not make application for sanatorium admission until four months later. Why the delay we are unable to find out. Two months after application he was admitted to the sanatorium. Here the fault seems to lie with the patient.

*Case 2838.*—A man began to cough six

years ago, but delayed consulting a doctor for a year. This doctor did not examine chest or sputum and agreed with the patient's own diagnosis of "flu", but told him that probably his lungs were affected. (This old country doctor was at least tuberculosis minded.) But another physician laughed at "such nonsense" and told the patient he was as sound as his doctor. (This sort of nonsense is often quoted by the patient.) The patient, wanting to believe the best, accepted the latter diagnosis (Sic) until February, 1929, when bad matters became worse, and he was forced by symptoms to wonder if, after all, his second doctor was so reliable. He consulted a third physician, who used all methods available to make a diagnosis. So in February, 1929 (six years too late), a diagnosis of tuberculosis was finally and definitely impressed upon the patient. Application to sanatorium was made. Then came a wait of six months before admission was possible.

#### *Conclusion*

So from this study we see that the medical man has some of the responsibility fall on his shoulders for delay, but it is also shown that a very large part of the delay is attributable to the attitude of the patient who refuses to believe, or is careless of facts, and the third factor for which neither the doctor nor the patient is accountable; namely, the lack of beds for this special type of disease.

The solution of the problem then is a tripartite one; education of the public upon the importance of care of the body and frequent examinations; education of the physicians to make them think of tuberculosis, and to realize that to withhold the diagnosis of tuberculosis when definitely made is really unkind and unfair to the patient, often robbing him of valuable time; and lastly, education of the state law makers and appropriation committees that Georgia still needs more beds for the care of tubercular patients.

I have not discussed the financial side of the matter. Sometimes the failure of the patients to have medical examination is due to lack of funds, but it is believed that this factor is of least importance.

Granted that in many cases the patient is to blame, there remains still a number in which the doctor is to blame. It is to be emphasized again and yet again that all diagnostic aids should be employed if the physi-



cian is to do his duty. The patient has a right to expect this. Sputum examination, while not infallible and of relatively little value in very early tuberculosis, in most cases of manifest clinical diseases is of very great help. X-ray examination is not the last court of appeals, but is a valuable aid in many cases. In these days, both of these aids are available to most physicians, and the importance of thorough physical examination should never be forgotten. In many cases, then, delay in diagnosis could be avoided by intelligent use of all diagnostic aids by the physician, thus lifting the blame from the shoulders of the profession.

### BASAL LESIONS OF THE LUNGS

#### *The Importance of Thorough Investigation*

J. C. BURCH, M. D.\*

*Alto*

It is most important for the medical man to be ever on the alert while examining his patient, ever looking for the unusual possibilities, for he will surely encounter them, to his mental disquietude and to his patient's regret, if they pass unrecognized.

Particularly is this true in pulmonary tuberculosis. The patient does not always come presenting the symptoms of loss of weight, pleurisy with effusion, hemoptysis, etc., nor are the physical signs always typical. The onset is variable. Cough and expectoration are perhaps the most constant symptoms, and yet these are common in all respiratory diseases.

The location of the lesion probably too often determines our diagnosis. The old saying, "Pathology in the upper third, tuberculosis; in the lower third, not tuberculosis," is frequently wrong. Those who have the opportunity of seeing a large number of chest conditions and who carefully and patiently make an etiological diagnosis will find many exceptions.

Apical lesions, recognizable both by physical examination and roentgenogram, often

disappear after cleaning up pathologic conditions in the throat, nose, and sinuses. Basal lesions are so frequently tuberculous that this possibility must always be borne in mind. It often takes careful application of all the diagnostic methods and the careful exclusion of other conditions before we reach the correct conclusion. The diagnosis of tuberculosis is not always easy.

Our usual procedure on discovering a basal lesion is not to pass it by as non-tuberculous, but to prove definitely that it is not, and, if not, we try to find out what it is. In order to do this we examine daily twenty-four hour specimens of the patient's sputum for ten to fifteen days, unless we get a positive in the meantime. If the examinations are persistently negative we do a concentrated antiform test. If, by repeating this test, we still fail to find the tubercle bacilli, and still have reason to feel that tuberculosis is possible, we give the patient subcutaneously Old Tuberculin in gradually increasing doses up to and including 10 mgms., provided, of course, there occurs no general nor peri-focal reaction. During this diagnostic procedure the patient is carefully observed for any evidence of reaction, especially looking for such symptoms as chest pains, elevated temperature or increase in pulse rate, or any change in cough or expectoration. The daily examination of sputum is still carried on during this time. After the patient has received 10 mgms. O. T. he is given another physical and roentgenologic examination, and this is compared with the one made previous to his taking O. T., and any possible changes are carefully noted. If the patient has a general reaction, or we find definite evidence of peri-focal reaction we are justified in making a diagnosis of tuberculosis. On the contrary, if there is no general nor peri-focal reaction we can safely say that it is not tuberculosis. Certainly, if 10 mgms. of O. T. fails to provoke a reaction there is no active or clinical tuberculosis.

The following case is interesting:

Mrs. X., aged 35, has one sister with advanced pulmonary tuberculosis. Three children are all living and apparently well.

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In 1918 she developed influenza. She was six months pregnant at the time and miscarried. Three weeks later a severe pain came beneath the right clavicle, temperature ranged from 100-104 for the next few days. She developed a cough and yellow expectoration shortly after this pain. The cough and expectoration, together with weakness, lasted for three months and she was unable to work until January, 1924.

December, 1924, the patient had a severe cold and began having pains in base of her right chest. A few days later she began expectorating yellow pus and running a temperature (100-103). She complained also of malaise and loss of weight. These symptoms became less severe in about four weeks, but have persisted.

The patient is fairly well developed and nourished. Pupils are equal and react normally. There is no apparent glandular enlargement. Mucous membranes are pale and she wears dental plates. Nares, nasal fossae, larynx and pharynx are not remarkable. The heart is apparently normal. Examination of the lungs reveals impaired resonance over the right base anteriorly and posteriorly; breath changes and coarse rales are heard over the same area, both on deep breathing and after cough. On the left, broncho-vesicular breathing and a few fine post-tussive rales are heard in the second interspace anteriorly.

Roentgenogram: The chest is symmetrical. The shadows of the heart and diaphragm are within normal limits. Right: Beginning at the third rib anteriorly and reaching to the base appears scattered coarse mottling, increasing in density and becoming more confluent as it reaches the base. Just lateral to the spine and between the third and fourth ribs anteriorly appears a circular area of rarefaction surrounded by a dense border and containing a fluid level, interpreted as a cavity. Left: Nothing definitely noted except a possible thickened pleura.

Discussion: This is not a typical picture of tuberculosis, but as the pathologic lesion reaches the third rib it may be, however, a positive sputum would be desirable, as the bulk of the disease is in the base. Collapse of the right lung is the treatment advised. Tubercle bacilli in moderate numbers were found in a subsequent examination of the sputum. (This patient is at present doing well under pneumothorax.)

Without a sputum examination the above case would not be easily diagnosed. It might well be a chronic pulmonary abscess cavity

with partially fibrosed walls and extensive collateral inflammatory changes. But the sputum examination, as is often the case, clinches the diagnosis. So it seems to be the better plan in all apical lesions to think of them as *being* tuberculous, but prove them to be; and all basal lesions as being *not* tuberculous, but prove them not to be.

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## CORONARY THROMBOSIS\*

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"A noble knight, Sir Roberty Darcy, an ancestor of that celebrated physician and most learned man, my own dear friend, Dr. Argent, when he had reached to about the middle period of life, made frequent complaint of a certain distressing pain in the chest, especially in the night season; so that dreading at one time syncope, at another suffocation in his attacks, he had an unquiet and anxious life. He tried many remedies in vain, having had the advice of almost every medical man. The disease going from bad to worse, he by and by became cachectic and dropsical and finally, grievously distressed, died in one of his paroxysms. In the body of this gentleman . . . we found the wall of the left ventricle ruptured, having a vent in it of the size sufficient to admit any of my fingers, although the wall itself appeared sufficiently thick and strong. This laceration had apparently been caused by an impediment to the passage of blood from the left ventricle into the arteries."

Thus William Harvey reports a case which most certainly was one of coronary occlusion. According to Hamman, the literature of the past one hundred and fifty years is crowded with clinical and anatomical observations on coronary occlusion. Is it not strange, then, he asks, that little or no progress in the recognition of the distinctive features of this disease was made until the past fifteen years?

Cohnheim taught that coronary occlusion

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\*Read before the Fifth District Medical Society, Athens, Georgia, August 14, 1929.

always resulted in death. Porter, thirty years ago, showed that ligation of the coronary in dogs did not always result fatally. Furthermore, it was thought to be a rare disease and not diagnosable except at autopsy; as a matter of fact it occurs rather frequently and has distinctive signs and symptoms. Dock, Osler, Albutt, and more recently Herrick (1912 and 1919) were pioneers in correlating clinical and autopsy findings. Probably it is to Herrick that we are indebted for the recent revival of interest in the subject. Wearn, in 1923, reported on nineteen cases observed at Peter Bent Brigham Hospital; and following his report numerous articles and reports of cases have appeared. Because some of these patients survive the attack, and because of its resemblance to acute abdominal conditions, its clinical recognition is most important.

The following report of one case, recently observed by me, illustrates many of the important points upon which a diagnosis of coronary thrombosis is based.

Case 1.—Male, white, age 68. Four years previously had an attack diagnosed as angina from which he recovered. Blood pressure had been high for a number of years, and there was albumin and casts in the urine. About ten days previous to the present illness he had influenza, but did not go to bed for more than a day or two. It was during convalescence from this illness that while sitting quietly playing solitaire he was seized with a severe pain in his left chest. He was gotten to bed and I saw him a few minutes later. Pain was quite severe over the precordium and radiated to his left shoulder. The pain of this attack he said was different from the pain of four years before. He was lying in bed propped up on pillows, his breathing was somewhat difficult, his face was pale, and small beads of perspiration were evident on his forehead. He was lying perfectly still. His pulse was weak and rapid, but not irregular. The heart sounds were distant and a bit feeble; no murmurs, but the heart was enlarged (not more so than during the past year). Blood pressure, which had been 190 systolic, was considerably reduced. I gave

him one-fourth grain of morphine and an inhalation of amyl nitrite. From neither did he get any appreciable relief. The morphine was repeated, but still without much relief. This was about 10 p. m. The following morning his condition was unchanged, the pain not quite so severe. That afternoon it was noticed that the urine was small in amount and the pulse more rapid, also a few rales were heard at the base of the lung and he had a cough. His condition throughout the succeeding days gradually changed for the worse. This was indicated by cyanosis and oedema of the lungs, increased pulse rate with irregularity at times, dyspnoea, and suppression of urine. On about the third day a friction rub was heard between the left sternal border and the left nipple line, and the temperature was gradually rising. The following day the pericardial friction rub had disappeared, but the fever had increased. Enlargement of the liver developed, cyanosis and dyspnoea increased, and finally Cheyne Stokes breathing, delirium, coma, and death in about ten days from the beginning of the attack.

This case, as we shall see, illustrates many of the signs and symptoms of coronary thrombosis.

### *Etiology*

Males are more often attacked than females. Willius discussed thirty-five cases, thirty of which were males. It is rarely seen before forty; most often in the sixth and seventh decades of life. There is very little evidence of syphilis or rheumatic fever as factors, although some authors feel that rheumatic fever has been neglected in the etiology of this disease. Perhaps investigation of this disease after the manner of Warthin might show a syphilitic myocarditis. Infections do not seem to play a part, but tonsillitis, influenza, and allied conditions must be considered. Heredity is apparently not a factor. Those factors that cause arteriosclerosis probably play the chief part in the causation of coronary thrombosis.

### *Symptomatology*

In the previous history there may have been either no symptoms or only mild symp-



toms of cardiac disturbance. There may have been, as in Case 1, previous attacks of angina. There may be severe decompensation and even hemiplegia. Hamman has divided the symptoms into four groups as follows:

1. Immediate symptoms associated with the occlusion;
2. Symptoms associated with myocardial failure;
3. Symptoms associated with myocardial infarct;
4. Additional symptoms.

The immediate symptoms of occlusion are pain and shock. The pain is sudden and variously described. It may be sharp, excruciating, knife-like, or it may be suffocating, choking, squeezing, vice-like, and constricting. It is usually substernal or precordial, but may be felt only in the epigastrium or the hypochondriac area; or it may be in all of these areas. It may radiate to the shoulder and arm, to the back, to the abdomen, etc. It is usually constant and is not relieved by nitrites; the so-called "Status Anginosus." It usually requires several doses of morphine to relieve, and even then it may change only to a dull ache, or become intermittent. SHOCK is indicated by marked prostration, a sharp fall in blood pressure, and suppression of urine. The skin is cold, moist, and "ashen pale."

The symptoms of myocardial insufficiency appear quickly. Rales may be heard at the base of the right lung within a few hours after the accident. Dyspnoea may be a prominent and, in the occasional case, the first and only symptom. Other symptoms may be cyanosis, oedema of the lungs, enlargement of the liver, subcutaneous oedema, suppression of urine, albuminuria, feeble cardiac impulse with faint heart sounds, arrhythmias, murmurs; and finally Cheyne Stokes respiration, delirium, coma, and death.

The symptoms of myocardial infarct are fever and leucocytosis, pericarditis, embolic phenomena, and cardiac aneurysm and rupture. The detection of a pericardial friction rub almost certainly means coronary occlusion. The embolic phenomena have been

discussed at some length by Paullin, Hamman, and a few others.

"The early appearance of embolic phenomena will add the final evidence to complete the diagnosis." These may occur a few hours or a few months after the occlusion. The immediate effect of the occlusion, pathologically, is the formation of an anaemic infarct, or an area of myomalacia. If the infarct is small repair may result without much damage to the heart; if large it may reach the pericardial surface with resulting pericarditis and a pericardial friction rub heard over the infarcted area. The infarct may reach the endocardium where small mural thrombi form and bits of these break off into the chambers of the heart. From the right ventricle they go to the lung, from the left to the general circulation and may lodge in the brain, the extremities, the kidneys; they may lodge in two places at the same time. Paullin has reported a case of gangrene of the leg due to an embolus of the right femoral artery, and Hamman a case in which there was simultaneously a left-sided hemiplegia and a disappearance of the pulse in the right wrist. Finally the infarcted area may result in aneurysmal dilatation of the ventricle and rupture of the heart. Nuzum and Hazen reviewed 320 and reported five cases of spontaneous rupture of the heart. Two hundred and twenty-six were due to coronary thrombosis.

The additional symptoms are nausea and vomiting, diarrhea, characteristic facies, vasomotor symptoms and nervous symptoms. Nausea and vomiting may follow immediately upon the pain, as may diarrhea. The facies is described as "ashen gray", anxious, etc. Usually there is generalized sweating, and there may be insomnia, delirium, and coma.

Recently electrocardiographic studies have been made by Pardee, Smith, Gordinier, and many others. They all agree that some peculiarity of the T wave, usually an inverted T in one or more leads is probably characteristic of coronary thrombosis.

The severity of symptoms, according to Scott and Harvey, depends upon three factors: (1) the suddenness of closure; (2) the

presence or absence of previous myocardial failure; (3) the location of the occluded vessel. The coronary arteries communicate, especially the finer branches, in a mesh of arterioles and capillaries, therefore if the occlusion is gradual, thus giving time for the collateral circulation to become established, there may be no symptoms. In the event that a relatively unimportant branch is occluded or the resulting infarct is small, there may be no symptoms other than pain and shock. It is in this type of case that the diagnosis is most difficult and most important. However, sudden death may follow this type of occlusion. In those cases of previous myocardial failure the only symptom may be a sudden increase in dyspnea, especially, but also in all other symptoms. They believe that myocardial disease and coronary disease are very intimately related.

#### *Diagnosis—Differential*

*Angina Pectoris:* The character of the pain is the same, but coronary thrombosis is much more likely to simulate cholelithiasis, perforated gastric or duodenal ulcer, or some acute abdominal condition. The pain of angina lasts minutes, that of coronary occlusion hours or days. The chief difference is myocardial failure. There is no heart failure in angina pectoris, and the blood pressure is elevated if there is any change at all. A pericardial friction is never heard in angina. The nitrites relieve angina, but have no effect on coronary occlusion. If recovery takes place the heart of angina is not damaged in its efficiency, but the heart of coronary thrombosis is always lessened in efficiency.

*Cholelithiasis:* Faulkner, Marble, and White studied thirty cases of coronary occlusion and thirty of cholelithiasis, with the following important differences: In cholelithiasis there were twenty-four women and six men of an average age of 47.2 years; in the coronary group six women and twenty-four men of an average age of 58 years. Symptoms had been present in the gallstone group from twenty-four hours to twenty-seven years, with an average of twenty-eight months; in the coronary group from one and

a half hours to five years, an average of six and a half months. Previous attacks of angina generally indicated coronary occlusion. The location and radiation of the pain in cholelithiasis was the right upper quadrant of the abdomen, epigastrium, and upper right thorax and radiating along the right costal border to the back and right shoulder blade. The pain of coronary thrombosis may be substernal, precordial, or epigastric, and radiates to the left shoulder and arm. It may be felt in the jaw, the back, or the testicles. The pain of gallbladder colic is intermittent, sharp, and knife-like, while that of coronary occlusion is suffocating, choking, and is constant. The pain of cholelithiasis may be brought on by eating and is relieved by morphia. That of coronary thrombosis does not seem to be related to meals and is generally not relieved by morphia. Jaundice is more frequent in cholelithiasis. The liver may be enlarged in both. There is usually no sign of myocardial failure in cholelithiasis. Fever and leucocytosis may be present in both. It must be remembered that both conditions may be present in the same patient at the same time.

#### *Perforation of Gastric or Duodenal Ulcer*

This is usually a disease of young men and there is generally a preceding history of digestive disturbances. Shock in perforated ulcer is extreme. The attitude of the patient is entirely different from that of the patient with coronary occlusion; usually he is continually turning about in bed, and there is no cyanosis and no marked dyspnea. The perforation generally follows a heavy meal or some dissipation. The abdomen in both conditions may be of a board-like hardness, but relaxes sooner in coronary thrombosis. When symptoms of peritonitis appear there is no doubt as to the correct diagnosis.

There are other acute conditions of the upper abdomen, but time will not permit me to go into their differential diagnosis. Morris Kahn has recently made a study of tender spots on the chest of patients with anginal pain. He claims it to be especially valuable in differentiating myocardial and upper abdominal pain. In no case studied by him

without heart involvement were tender spots found. These spots are located over the second, third, and fourth ribs to the left of the sternum (4C and 2, 3, T), and the second and third ribs in the outer part of the pectoral region (4C).

### *Prognosis*

One and one-half per cent of the necropsies at the Massachusetts General Hospital showed complete occlusion of a branch of the coronary arteries. This does not mean that all these died of coronary occlusion, but that some patients recover from the effect of the occlusion and die of some other condition. Willius studied the mode of death in thirty-five cases of coronary occlusion on 90 per cent of which an autopsy was obtained. Twenty-five cases (71 per cent) terminated suddenly, and ten (29 per cent) gradually. The left coronary was involved twenty-nine times, the right two, and the right and left two. Cardiac aneurysm developed in four, and cardiac rupture in one. He thinks that about half of the patients with coronary thrombosis die at the time of the attack or within a few days. The other half live from a few months to several years, with varying degrees of cardiac handicap. The important cases for us are those that survive the immediate attack, which are not an inconsiderable number. We must also remember that, following the immediate attack, the patient surviving, the power and efficiency of the heart is always impaired. This fact should have an important bearing upon treatment.

### *Treatment*

The treatment of the attack resolves itself into relief of the pain and enforced rest. Morphine in repeated doses is our main reliance plus prolonged rest in bed. It is thought by some that digitalis is not indicated because if the heart muscle is weakened at the area of infarct stimulation by digitalis might hasten the formation of aneurysm and rupture of the heart. Others claim that digitalis is indicated, especially for the symptoms of myocardial failure. The treatment of those patients who survive the attack is largely a question of regulation. The heart muscle

has been permanently damaged, therefore the diet, the excretory functions, the mode of life, etc., must be carefully regulated. In 1903 Loeb reported on experimental data that indicated an increase in the rate of perfusion with theobromine. Since 1924 this drug has been tried on patients with anginal pain at the Mayo Clinic. Improvement was noted in about half of the cases so treated. This is not theobromine sodium salicylate. Recently they have been experimenting with euphyllin, a drug composed of theophyllin 80 per cent and of ethylenediamine 20 per cent. Perfusion experiments carried out by Smith, Miller, and Graber showed that with theophyllin an increase of from 20 to 45 per cent occurred in the coronary blood flow; with euphyllin the increase was from 40 to 90 per cent. Euphyllin also increased the amplitude of the cardiac contraction and the pulse rate from twenty to thirty beats per minute. This drug is now obtainable under the name of Metaphyllin. It would seem logical to use it in those cases of coronary thrombosis that survive the immediate attack. I have used it in one case lately with apparently good results.

### *Conclusions*

1. A typical case of coronary thrombosis is reported.
2. The important points in the differential diagnosis are emphasized. This with especial reference to the differentiation of acute upper abdominal conditions.
3. The etiology, pathology, symptoms, etc., are discussed.
4. Attention is directed to the treatment with euphyllin or metaphyllin.

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PRACTICAL USE OF THE  
ELECTROCARDIOGRAPH\*

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In order to properly study a cardiac case every possible bit of data must be obtained. It should be interesting therefore to summarize and briefly discuss the conditions in which the electrocardiogram gives information of value. Indeed it is important to know what information concerning the condition of the heart is given by an electrocardiogram that cannot be obtained by other methods of study.

An electrocardiogram is simply a photographic representation of the electric current generated by the contraction of the heart muscle. Without going into the detailed analysis of the physical phenomena responsible for this it may be stated that this graph gives three types of information: (1) The rate and rhythmic relations of the separate contractions of the heart; (2) The manner of origination and conduction of the cardiac impulse through the various portions of the heart muscle and the time relations of the contractions of these parts to each other, and (3) An indication of the amount of heart muscle contracting at any given time.

Perhaps the electrocardiograph is most frequently useful in the study of the arrhythmias. The clinical interpretations and significance of cardiac arrhythmias will depend not only on the character of the irregularity but upon the facts obtained from the history and physical and laboratory examination of the patient. Certain of the arrhythmias, such as sinus arrhythmia, auricular fibrillation, etc., are common and easily detected by physical examination. However, there are three forms of disorder of the cardiac rhythm which can only be detected by the electrocardiograph or polygraph. These are certain forms of heart block, auricular flutter and bundle branch block.

Electrocardiographically, simple sinus tachycardia appears normal except for increase in

rate and in height of R. and T. waves (Wiggers), and they are differentiated from paroxysmal tachycardias in that the latter begin and end abruptly. The E. K. G. of sinus bradycardia is normal except for possible flattening, notching or inversion of P. waves and are thus distinguished from partial or complete A. V. block and nodal or idioventricular rhythm. Phasic sinus arrhythmia shows rhythmic cycles of variations in rate usually synchronous with respiration.

A rare but important arrhythmia is nodal or junctional rhythm. Here the sino-auricular node loses control of the heart and the auriculo-ventricular node becomes the pacemaker, initiating practically synchronous impulses in the auricles and ventricles. Such a condition is suggested by a slow regular pulse of thirty-five to fifty per minute and is confirmed by an electrocardiogram. If the impulse starts in the upper or auricular portion of the node, the auricle contracts first, but the P-R interval is shortened and the P. wave is inverted or distorted. If the impulse arises in the center of the node the auricles and ventricles contract simultaneously and the P. wave is lost in R. With the impulse arising in the lower portion of the A. V. node the ventricles contract before the auricles and P. occurs after R. It is important to recognize nodal rhythm since such a condition, when permanent, indicates destruction of the sino-auricular node and therefore is evidence of widespread myocardial disease. Transitory nodal rhythm may be caused by excessive doses of digitalis or other drugs and by toxic or febrile conditions.

Extra systoles or premature contractions are usually diagnosed with ease clinically. Their significance will depend upon whether other evidence of organic heart disease can be demonstrated and if so the prognosis and treatment will depend on this condition. The electrocardiograph shows whether these premature contractions arise in the auricle, A. V. node or ventricle and, when they are frequent, differentiate this condition from the auricular fibrillation.

In fibrillation the electrocardiograph is characterized by the absence of normal P. waves, the presence of the fine fibrillary

\*Read before the staff meeting of the Piedmont Hospital, Atlanta, Ga., January 10, 1930.

waves and the irregular response of the ventricular or R. waves. In addition, prognosis may be clarified by the demonstration of complicating arrhythmias such as bundle branch block and premature ventricular systoles which indicate a more widespread pathological process. It is important to recognize the presence of fibrillation and complicating arrhythmias, for, as Willius has shown, the "mortality attending auricular fibrillation doubles and in some instances trebles that attending similar types of heart disease not complicated by this type of arrhythmia."

Paroxysmal tachycardia may usually be diagnosed by the finding of a pulse which changes abruptly from normal to a rate of 180 to 220 beats per minute and is accompanied by symptoms of praecordial oppression, anxiety, and sweating. It is not changed by breathing, posture or exercise, but may be by vagal or orbital pressure. The electrocardiograph will show by minor changes in the curves whether the initiation of the impulses is in the auricle, A. V. node or ventricles.

Auricular flutter is distinguished from the last named condition by the fact that the ventricular rate is less rapid, usually between 120 and 175. The electrocardiograph will show the frequent fine regular P. waves at a rate of 240 to 350 per minute and will indicate the degree of block. There is almost always some blocking present with the auricles and ventricles beating at a ratio of two to one, three to one, or more. The pulse may vary from thirty-two in complete block with idio-ventricular rhythm to 320 per minute when on rare occasions the ventricles respond to every beat of the auricles. The prognosis in flutter depends on associated findings in history and physical examination and on the response to treatment.

The various forms of disturbances of impulse conduction or heart block are best demonstrated and illuminated by means of the electrocardiograph. The block may be located in several places: (1) Between the sino-auricular node and the auricle; (2) Between the auricle and the ventricle in the A. V. node or His bundle; (3) In the bundle branches, and in the arborization of the

Purkinje system. The location of the block is shown in characteristic electrocardiograms.

Sino-auricular block is shown by a complete disappearance of P R S and T waves and is caused by abrupt cessation of auricular and ventricular systole for several seconds. In general, it is probably due to abnormal vagus tone and has no serious prognostic import.

Auriculoventricular block is shown by: (1) A delayed A. V. conduction time with increased P-R interval; (2) Occasional dropped beats; (3) Regular dropped beats with a ratio of 10:9, 8:7, etc.; (4) Regular ventricular response to every second, third or fourth auricular beat; 2:1, 3:1, 4:1 rhythm; (5) complete A. V. block with idioventricular rhythm. Milder grades of partial A. V. block are most often seen in digitalis therapy and in acute infections, particularly those of the respiratory tract. The condition clears up with recovery from the infection or cessation of the digitalis. Complete chronic block is of more prognostic importance. Twelve cases of congenital block due to defects in the A. V. bundle have been reported. Atherosclerosis, syphilitic or fibrous myocarditic, embolism, or pressure from tumor or aneurism may cause the acquired form of block by involvement of the bundle of His. The effect of digitalis on acute infections in producing block is enhanced by lesions like these, but demonstration of persistent or recurrent block indicates myocardial changes.

Bundle branch block is partial or complete interference with conduction in one or both of the branches of the bundle of His. This is shown by widening of the Q. R. S. complexes, notching of the Q. R. S. complexes or presence of a diphasic ventricular curve with T in the opposite direction to R. Block in the right branch has a general appearance of left ventricular preponderance; block of the left branch, the reverse. The shape of these curves is characteristic, as will be explained later.

Arborization block or interference with conduction in the terminal divisions of the Purkinje system causes curves differing from bundle branch block in that the diphasic

curve is absent, while a negative T-wave and a splintered R-wave of low amplitude are characteristically present. The prognosis of both of these conditions is ominous.

Experimental study has shown that when the right bundle branch is injured the contraction of the left ventricle produces a characteristic curve. Likewise when the left branch is blocked the right ventricular curve is characteristic. The normal curve is the algebraic product of the curves of the right and left ventricles. Normally the left ventricle has about 1.8 times as much muscle as the right ventricle. Now it is found that hypertrophy of either ventricle produces characteristic changes in the tracing. Thus we find curves of right ventricular preponderance as indirect evidence of left bundle branch block or of mitral stenosis with the right ventricle hypertrophy, and in right bundle branch block, hypertension, or aortic valve disease the left ventricular complex is more marked in the tracing. In this way on approximate indication of the amount of heart muscle contracting may be obtained.

A condition indicating extensive myocardial disease that is often shown in the electrocardiogram is *pulsus alternans*. When shown, each alternate R peak is higher than its predecessor. However, this condition may fail to register on the tracing even when it can be demonstrated by radial palpation, sphygmomanometer and polygraph.

The confirmation of a suspected coronary infarct may be of considerable importance. The myocardial damage thus produced is usually indicated on a tracing taken soon after the accident by a "high take off" of the T wave. That is, the S-T interval lies above the base line. Later the S-T interval lies on the base line, but there is an inverted T wave with an upward convexity of the first portion of the T wave that is characteristic. Under normal conditions or under digitalis therapy an inverted T wave may be present in the third lead and sometimes in the first lead, but when T is inverted in the second lead it indicates severe myocardial disease. A low S-T interval usually indicates a digitalized heart.

Very little direct information concerning

endocarditis, valvular disease, cardiac reserve and compensation can be obtained by the electrocardiograph. However, sufficient data are obtained by its use to make it worth while as a routine procedure and imperative in the study of arrhythmias and in suspected coronary closure.

157 Forrest Ave.

## THE ELECTROCARDIOGRAPHIC METHOD IN DIAGNOSIS†

VERNON E. POWELL, M. D.

*Atlanta*

The principle of the electrocardiogram is dependent upon physiological laws of contracting muscles and physical laws of electricity. Differing electric effects (potential) between the contracting portions and non-contracting portions of the heart muscle produces (as in any muscle) an appreciable amount of electromotive force (current). Passage of the cardiac wave of excitation over its neuromuscular path within the heart also produces a current. These minute currents associated with the events of a cardiac cycle are sufficient to deflect the string of a sensitive galvanometer. The electrocardiograph, the apparatus used in taking electrocardiograms, is a complex galvanometer; the string itself a delicate platinized quartz filament suspended between the poles of its powerful electromagnet. The movements of the string are magnified with a system of microscope lenses and photographed through an exact timing device on moving film or bromide paper. The resulting tracing is an electrocardiogram, which represents an accurately timed record of the electrical phenomena accompanying the action of the heart.

Interpretation of electrocardiograms demands as full knowledge of the special anatomy and physiology of the heart as does clinical cardiology itself. Only certain positive conclusions can be drawn from any electrocardiogram, and unless we appreciate what type of information may come from it, we cannot appraise the value of the method in

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our study of the patient. Taken alone, it is admittedly of minor importance in cardiology. Correlated and linked with the whole chain of evidence derived from a complete study of the patient, it often proves an invaluable aid in the problem at hand. Full history, physical examination, cardiac function tests, roentgenographic studies and laboratory, all have their indispensable usefulness.

The cardinal use of the method is to directly examine the all-essential living heart muscle. There is no case of structural heart disease in which it would be superfluous. Degenerative changes within a heart produce deviations from the normal waves in the record obtained from that heart. The recorded abnormalities may be slight or marked, but where persistently found and characteristic, organic heart disease is the rule. Where normal waves are present, it is fair to believe that the patient has a ventricular muscle that is probably normal, or at least has only slight or localized disease.

The force of the cardiac contraction is not measured by the electric tracing. There is no apparatus today that will measure the vigor remaining in a diseased or failing heart muscle. A function test with exercise will indicate the ability of the heart to carry on the circulation, but it does not show the presence or absence of structural change. Cardiac disorders, where structural change is absent, either do not alter the curves of the electrocardiogram or do so in no greater degree than might occur in individuals who suffer no symptoms referable to the circulation. Thus there may be no difference between the curves of a normal heart and one affected with valvular disease, or bacterial endocarditis, or one that is obviously failing. In order to produce any change in the record, the cardiac pathology must either alter the potential of the acting heart muscle or it must interfere with the conduction of the impulse at some point from its inception at the sino-auricular node to its final distribution in the ventricular muscle. Hence, the second major use of the method suggests itself in the iden-

tification of the many forms of cardiac arrhythmias.

In the analysis of these disturbances, the electrocardiogram is the most precise method we possess. The trained observer ordinarily does not need to make use of it to help him with the common arrhythmias, for in general there are signs or symptoms which reveal the true nature of the disorder. Nevertheless, there are some irregularities of the heart's action where precise aid is very serviceable,—even necessary. And not only will the electrocardiogram indicate the abnormal rhythm present, but it will locate the origin of the abnormal focus for us. It is well to mention some of the arrhythmias that clinically are most confusing: An irregularity that strongly suggests auricular fibrillation may result from numerous extrasystoles arising from multiple foci of irritability. Nodal rhythm, in which the abnormal impulse arises at or near the auriculo-ventricular node, and passing in both directions, causes the auricles and ventricles to contract simultaneously, or almost so, is likewise a difficult condition to determine without instrumental means. Ventricular tachycardia, less common than auricular tachycardia, occurs more often in extensive myocardial disease. The tracing distinguishes it and also estimates the underlying muscle damage. It affords an exact diagnosis of mystifying regular and irregular flutters. Heart block may be noted in all its variations. Delayed conduction time, in which the impulse is slowed in its course from the sino-auricular node to the ventricles, usually precedes the severer forms of block. Clinically, we are not able to pick up this earliest degree of block, nor are we able to differentiate between a blocked impulse in the right or left branch of the bundle of His. Complete auriculo-ventricular block may be present in auricular fibrillation, and also in auricular flutter, where in the latter, partial block is usual. It is in disturbances of these kinds, usually grave, that the electrical method is invaluable, if we are to arrive at a correct diagnosis.

In a few other conditions, the electrocardiogram is more or less useful. It will aid

in gauging the effects of therapeutic agents, as quinidine and digitalis. It will furnish valuable evidence towards substantiating a diagnosis of coronary thrombosis as suggested by an attack of prolonged cardiac angina. Certain known changes in the ventricular complexes have a very serious clinical significance, and with due regard in making conclusions from the records, our prognosis will become much less fallible. Prognosis in cardiac disease is particularly difficult; here we have an aid. While it does not register simple hypertrophy of the heart, the electrocardiogram helps in the clinical interpretation of this condition. If the muscle mass of one ventricle is relatively greater than that of the other, permitting either the right or the left ventricle to predominate in the contraction, the type of tracing obtained will suggest relative hypertrophy of one side of the heart over the other. This knowledge has a clinical application at times, as in evaluating the significance of an elevated systolic blood pressure, or in appreciating the effects of certain valvular lesions on the heart. Increase in the amplitude of the auricular waves usually, but not always, indicates hypertrophy of the auricles. Identical tracings with the patient in several different positions are obtained from cases of chronic adhesive pericarditis.

There is a great deal about the method that is not yet known, and much that is poorly understood. Our knowledge concerning it is developing slowly, and is built upon experience, experiment, and statistics accenting the autopsy. However, since the introduction of the electrocardiogram into experimental medicine, much confusion about the heart has been cleared up. It has its own special type of information, namely, the mechanism and character of the contraction of the heart, and the integrity of the muscle fibres composing its chambers. Sensibly used, there will be no depreciating clinical effort in the study of the patient.

Chairmen of committees, Councilors and other officers of the Association should submit written reports to the House of Delegates at its first meeting, May 13th.

## THE TREATMENT OF MALARIA\*

ROY A. HILL, M. D.

*Thomasville*

Before discussing the treatment of malaria, I should like to mention the death rate in Georgia from this disease. In 1928 there were 8.2 deaths per 100,000 of population. This shows a marked increase over the previous five years. These figures show that the death rate from malaria was 5 per cent higher than that of typhoid fever. Thomas County showed 65 deaths per 100,000 of population for the last year.

In order to have a better understanding of the treatment of malaria, it is well to review the life cycle of the malarial parasite. The parasites require two hosts: one, a certain species of the anopheles mosquito and the other, man. Sexual conjugation of the parasite takes place in the stomach of the mosquito. Asexual reproduction takes place in man with the development of both male and female gametocytes. The parasite produces disease in both man and the mosquito. The gametocytes produce disease in the mosquito and schizonts in man.

We do not know much about the symptomatology of the disease in the mosquito. In man, however, we know that the febrile reaction and the symptomatology are due mainly to the toxins liberated during the sporulation of the parasite, and the blocking of the capillaries by the parasite-carrying corpuscles. The parasite that the mosquito injects into the human blood by his bite enters the blood cell and there receives its nourishment and grows in the cell until the single parasite has multiplied or hatched into a large family, with destruction of the red blood cell. Each member of this family enters another red blood cell and goes through the same cycle, causing billions of parasites in the blood within a few days. After the fever is established, there are a number of these parasites that grow larger and float around in the blood, but do not multiply. These are called gametocytes, both male and

\*Read before the staff meeting of the John D. Archbold Memorial Hospital, Thomasville, Georgia, November 15, 1929.

female; and it is this form of the parasite that we are most interested in from the standpoint of preventive measures. The gametocytes apparently produce no lesion or symptoms unless withdrawn by the mosquito, in whose stomach their biological functions are consummated. After the formation of gametocytes in the blood of man, he is then called a human malaria carrier.

In order to make progress then in preventing malaria, we make our attack from two angles: First, mosquito destruction; second, gametocyte destruction, or the disinfection of the malaria carrier.

The mosquito destruction is purely a public health measure which needs no discussion here other than to say that it is the elimination of the breeding places of the mosquito. The disinfection of the human malaria carrier is what we, as physicians, are most interested in, and that is the destruction of the gametocytes.

During the experimental work on malaria by the United Fruit Company in the last few years, the conclusion has been reached that the administration of quinine favors the development, or in any case, the appearance of gametocytes in the peripheral blood. The findings were as follows: "Generally speaking, the gametocyte rate in acute cases on admission to the hospital approximates from 8 to 15 per cent. After quinine administration this increases within a week to approximately 40 to 50 per cent."

Quinine is a curative agent in acute malaria in that it assists in ridding the peripheral blood of the asexual form of the parasite which alone is responsible for the symptomatology. These are the schizonts. With the gametocytes left and increased in number due to quinine, we have a malaria carrier exposed to the mosquito over a long period of time. Herein lies the value of plasmochin, as it influences directly the destruction of the gametocytes, or in case drives them from the peripheral blood, thus rendering the human carrier non-infectious to the mosquito. Plasmochin does not, however, cause the schizonts to disappear from the human blood, but when we give both plasmochin

and quinine both the schizonts and gametocytes disappear. Experiments have shown that all cases are cured or parasite free within six weeks of combined treatment.

I wish to report a few cases of the different types of malaria that have been treated in the John D. Archbold Memorial Hospital.

Attention should be called to the fact that trauma, surgical procedures or delivery of a pregnant woman will lower resistance against the parasite in a malaria carrier and in such cases it is advisable to commence treatment before the patient is delivered or develops clinical malaria.

*Case I.*—J. W. F., white, female, married, age 47, resident of Florida, admitted to the John D. Archbold Memorial Hospital October 10, 1929, with chief complaint of vaginal bleeding and pyrexia of six weeks duration. She gave a history of repeated attacks of malaria since childhood. Married seventeen years, nine miscarriages, only one child living and well. She had been taking large doses of quinine, 20 to 40 grains daily, for several weeks. The spleen was enlarged two and one-half inches below the costal margin. Hemoglobin, 40 per cent; red blood count, 3,100,000. She was given two tablets of plasmochin compound three times a day. Uterine bleeding stopped the first week in hospital after discontinuing the large doses of quinine. The spleen was not palpable after four weeks.

*Case II.*—J. M. P., white, male, age 35, a resident of Mitchell County, Georgia, entered the John D. Archbold Memorial Hospital in semi-coma; temperature, 104; hiccough; pain in left upper abdomen and left back, radiating toward bladder region; headache; with a diagnosis of kidney abscess.

There was a tender mass in the left hypochondrium which proved to be an enlarged spleen, and malaria plasmodia in abundance in the blood, which changed the diagnosis. Forty grains of quinine daily cured this patient.

We frequently have patients coming to the hospital with hiccough, headache, vomiting, albuminuria and stupor diagnosed as nephritis, and we find the blood positive for the estivo-autumnal type of malaria. They get well promptly on plasmochin compound.

*Case III.*—W. A. G., white, female, age 49, a resident of Florida, admitted August 21, 1929, in semi-coma, with a history of chills and fever all the summer. The patient would take quinine after each chill for only



a few days until the fever stopped, but would not complete the course.

Summary of findings on admission:

1. Marked jaundice, icterus index 240.
2. Enlarged liver.
3. Enlarged and tender spleen.
4. Profound anemia.
5. Blood pressure 90-80.
6. Hemoglobinuria and albuminuria.
7. Stupor.

Diagnosis: Hemoglobinuric fever.

After the initial purgative of calomel she was given the supportive treatment with 7 per cent glucose intravenously and small repeated doses of quinine intravenously. For the anuria we gave 1 c.c. salyrgan intramuscularly which did stimulate the kidneys. The patient died on the fourth day.

In hemoglobinuric fever the urine is dark in color, resembling coffee, jaundice develops, the patient is greatly depressed, the chills show no regularity, urinary output is decreased. The anuria can be accounted for by the plugging of the renal tubules and the markedly reduced blood pressure.

*Case IV.*—White boy, 8 years old, resident of Florida, had been well and able to attend school. He fell, but did not injure himself, had a slight convulsion and vomited.

On admission to hospital, the patient had twitching of body and frequent convulsions. Spinal fluid and eye grounds were negative. X-ray of skull showed no pathology. Estivo-autumnal parasites were found in the blood. Temperature rose to 106. The patient died the third day after the onset of his illness. The treatment was supportive and quinine was given, but improvement was temporary.

For hemorrhagic fever the treatment is supportive. Give the patient hypodermoclysis and later give about two grains of quinine intravenously.

Plasmochin "devitalizes" the gametocytes. Ten per cent of plasmochin is eliminated from the body through the kidneys in twenty-four hours and there is no danger from plasmochin if the patient is watched carefully.

Quinine and plasmochin are complementary. One is not to conclude that quinine can be replaced by plasmochin. Quinine has to be given. The physician will frequently be confronted by the problem of how it is best given.

—Bulletin of the John D. Archbold Memorial Hospital, Thomasville, Ga., January, 1930.

#### Discussion

*Dr. Rudolph Bell:* In acute malaria quinine seems to be effective by destroying the plasmodia by metabolic action, stimulating the cells, which is fatal to the plasmodia.

Of the various salts used in the treatment of malaria, quinine dihydrochloride is rapidly absorbed and destroys malarial organisms quicker than any other form of quinine. It is usually given intravenously. There is some danger in its use, but if given carefully no bad symptoms occur. I have had occasion to use plasmochin. Although I do not know much about it, it has been recommended by prominent men. I tried it in a case of acute malaria, with poor results, and my patient had chills for three days longer than necessary. I finally gave quinine, and with plasmochin it proved effective. Quinine is the only specific for malaria. After all, the only thing we have to resort to in the cure of malaria is quinine. After the acute symptoms it seems that plasmochin should be given at weekly intervals, commencing about one week after acute symptoms have abated, giving three or four treatments in that manner.

In chronic malaria we have secondary anemia and we have to resort to some form of iron and arsenic. I think the treatment for malaria is to cinchonize the patient and keep him cinchonized until all symptoms have abated.

*Dr. J. T. King:* Mosquitos live on plants and it is the female only that bites and she bites because she needs blood to enable her to reproduce.

*Dr. C. H. Watt:* At a recent meeting of the Third District Medical Society, at Dawson, Ga., Dr. Tolleson, of Smithville, Ga., read a paper on hemoglobinuric fever. This was one of the most intelligent and well presented papers on this subject that I have heard. He reported three cases that he had treated by the use of polyvalent antistreptococci serum. Every case had gotten well. He had specimens of urine from day to day. Within twelve to twenty-four hours after the first injection the urine had cleared up markedly.

There was lively discussion on the various forms of treatment for malaria, but the treatment of hemoglobinuric fever by the use of antistreptococci serum impressed me. Dr. Tolleson emphasized the fact that the serum should not be the whole thing. He was particular to alkalinize the patient, giving him plenty of fluids and giving the stomach complete rest. The paper was so well presented and so well gotten up that Dr. Dancy urged him to continue work along this line and to enter the contest for the Crawford W. Long scholarship.

*Dr. W. W. Jarrell:* The treatment of malaria the world over is quinine. The efficacy of plasmochin compound lies in the com-

pound rather than in plasmochin. With reference to serum, there is no logical reason why antistreptococcal serum should have influence on parasite breeding. I believe horse serum would give the same results. In some cases of black-water fever calomel is used instead of quinine. There is such a thing as getting a malarial patient quinine fast. As Dr. Bell said, quinine is the specific for malaria, and whether one gives it immediately or waits, sooner or later it has to be given. The thing to do is to treat the case heroically from the beginning and not quit too soon. Authorities claim that administering quinine daily for sixty days is required to get the blood sterile. Most of the time patients are given just enough quinine to make them quinine fast and they remain in a nascent state:

*Dr. C. H. Watt:* Dr. Jarrell did not understand the use of the serum. It was used to clear up the hemoglobinuria.

*Dr. Eustace Long:* There is one question that I have asked on one or two occasions before: "What is the effect of a meal of cinchonized blood on the parasite in the mosquito?"

*Dr. W. W. Jarrell:* When the English Government was cleaning up the Nile River, work practically had to be stopped on account of pernicious malaria. Quinine was given in five-grain doses three times daily to all employees. This kept the blood cinchonized so that when the mosquito introduced the larvae into the circulation, the parasite was immediately destroyed.

*Dr. George O. Davis:* I was very much interested in Dr. Hill's paper. I have made an intensive study of malaria for many years, and have found that one has to depend on quinine for treatment. Plasmochin compound cannot be depended upon to break up active malaria within three or four days. The best thing to break up an attack is quinine, but not in little doses. Give ten grains every four hours and follow this up with plasmochin compound, giving two of these tablets twice a day for seven days. Of course, if a patient comes in with hemorrhagic fever and has had no quinine it might be well to give a hypodermic of quinine, but in my experience these patients do worse under quinine than without it. The treatment for hemoglobinuric fever is to put under the skin one quart of normal saline solution. This will make the kidneys function to a certain extent. The patient will be vomiting and you cannot stop it. Give small doses of calomel repeatedly until you can stop the nausea. After you get the bowels going the nausea will cease. I have been following with cacodylate of soda

after getting the urine clear with plasmochin compound.

In chronic malaria we find a patient who has a chill every week and when we examine the blood we find grown parasites. As a rule if arsphenamine is used the patient never has another chill from malaria.

*Dr. Ernest F. Wahl:* There is a group of neurological cases caused by malaria. I had been seeing a good bit of true lethargic encephalitis when a young man of seventeen came in with generalized rigidity; the spinal fluid was normal and all neurological symptoms cleared up immediately on quinine by mouth. I should not have hesitated to call his trouble encephalitis if it had not been for finding malaria in his blood.

I have seen two cases where the patients were as purple as one suffering from acetanilid poisoning; the lips were blue like those of persons suffering from congenital heart disease. Both had taken about 120 plasmochin compound tablets without intervals of rest and were suffering with methemoglobinemia. There are just as many treatments for black-water fever as there are doctors. It is a common custom in some sections to get the patient drunk on pure alcohol. Those who have had most experience, American and British, emphasize the fact that alcohol is contra-indicated.

Dr. Davis beat me to the point regarding arsphenamine. Cases that have given me most trouble are the estivo-autumnal type. By giving some form of salvarsan or arsphenamine patients seem to get a foothold and immediately improve. I have given sodium cacodylate in large doses intravenously without untoward effects. Sodium cacodylate is a stable compound, while arsenic is very unstable and breaks up easily in the blood, throwing the entire load of arsenic into the system at one time.

*Dr. Harry Ainsworth:* The case I speak of is that of a young woman, 17 years of age, who had been married six months. She had chills and fever regularly, then irregularly. She was four and one-half months pregnant. She had not had quinine and when she came to the hospital she had very little fever, but was vomiting. The liver was enlarged. The patient was pale. Hemoglobin was 13 per cent. I did not know what to do about her. I tried to find out if the fetus was alive. Then miscarriage occurred and the fetus was found to have been dead for quite a while. It was remarkable how she cleared up on quinine. She got well enough to go home and I suppose she got all right.

*Dr. Agnew Andrews:* The doctors of old

(Continued on Page 126)



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## PEPTIC ULCER

A great deal has been said and written about peptic ulcer. In recent years the discussions have been prolific and opposing forces have changed camps in a disconcerting manner. Many former exponents of the medical treatment have changed and now advocate surgery and conversely some surgeons of undisputed authority are indorsing medical treatment. This state of affairs has resulted in confusion in the minds of many practitioners as to just what to do about a peptic ulcer, after all.

Much of this confusion is due to the attitude of mind that seeks to stereotype the treatment of ulcer, to prescribe in each case by rule of thumb, as it were. In reality the situation is very complicated and each case a problem which must be viewed and approached from many angles before a satisfactory solution can be reached.

As regards the etiology of peptic ulcer, for example, the ultimate primary cause cannot be said to have been discovered. However, we know with certainty that one or several secondary causes may operate in each given case. The neurogenic factors are being more and more emphasized. These are probably more often functional than organic and may consist of lack of balance between the vagus and sympathetic systems or psychogenic functional disturbances of the trophic nerves of the stomach. According to this conception peptic ulcer is more of a constitutional than a local disease. Then, too, disturbances in the blood supply to the affected areas are of prime importance and may be due to emboli, thrombi, arteriosclerosis, vascular spasm, or mechanical obstruction caused by traction on the pylorus or duodenum in marked gastropexia. Rosenow has verified the etiological role of infection by producing both acute

and chronic ulcers by intravenous injection of streptococci obtained from the mouth. Whatever the primary cause may be, two conditions are essential to the development of peptic ulcer, namely, a lesion of the mucous membrane and digestion of the pathological portion of the stomach wall.

Many considerations may influence the rational treatment in any given case. It is generally accepted that certain complications such as perforation, obstruction, hemorrhage, and early evidence of malignant degeneration are positive indications for surgery. On the other hand, the anatomical location of the lesion may be the deciding factor in treatment. Thus Cole states that operation on a corporic ulcer, or ulcer of the body of the stomach, is never justified unless by one of the complications mentioned above. Also he states that he has never seen an ulcer of the greater curvature that was not an ulcer of malignancy. In the absence of complications simple prepyloric and duodenal ulcers should respond to medical treatment, but in certain cases the social or economic status of the individual, and his business or home environment may make surgery advisable because medical treatment cannot be followed satisfactorily. Some patients cannot be made to cooperate over an extended period of time such as is necessary to carry out medical treatment. For these and for various other psychic reasons surgery may be indicated. There are many factors which must be considered in every case that will determine the best treatment for that individual. In no disease is the individualization of cases more important.

How, then, may we hope to simplify the situation and clarify the confusion existing in the professional mind as to the optimum treatment of peptic ulcer? The most striking therapeutic advances of the past have followed the discovery of the etiology of hitherto obscure conditions. This has illuminated the pathology of disease and pointed the way for rational therapy. So in peptic ulcer we must still continue our search for the primary etiological factor as a basis on which to build a simple and effective treatment.

J. C. M.



## CLINICAL PROCTOLOGY

A comparison of recent books on diseases of the anal canal, rectum and pelvic colon with those of the ear, nose, and throat does not show a great difference between the size of the volumes and the number of diseases discussed. In other words, there is not much difference in the number of diseases and the known facts obtainable on the two subjects. However, there is a great deal of difference in the open and almost constant discussion of diseases of the ear, nose, and throat in the literature, medical societies, and public health services when contrasted to the lack of discussion of the diseases of the anal canal, rectum, and pelvic colon, even among doctors. This is well illustrated by a recent program of the Southern Medical Association. In this organization there is no section on proctology and only one paper on this subject was presented and that was presented before the general session. Three afternoons were devoted to the section on diseases of the ear, nose, and throat. It seems just as important to discuss cleanliness and correct habits pertaining to the region of the anal canal and rectum, in order to prevent constipation, fissure, fistula, hemorrhoids, and many other ano-rectal diseases, as it is to discuss the care of the teeth and the removal of the tonsils.

The etiologic factor of many of the so-called "neuroses" of unknown origin can be easily demonstrated by a careful proctosigmoidoscopic examination, as neurasthenia is a common symptom of diseases of the ano-rectal region. This would seem to justify a freer discussion of this subject and a more careful proctological examination for diagnosis.

M. C. PRUITT, M. D.

## HEALTH EDUCATION WEEK—ITS SIGNIFICANCE TO GEORGIA

What Izaak Walton called "the second blessing", and what those who lack it may well consider the first will be the subject of an intensive educational effort in Georgia during the initial week of next May. Under the auspices of the State Medical Association and the State Board of Health meetings will be held in fifty or more cities with a view to advising people as to how this prime

blessing can be procured, how preserved and how made an even greater asset than now to our favored commonwealth.

Health is wealth. Without it other riches mean little to a person, and other resources little to a community. While some are born healthy and others achieve health, there are, strangely enough, men and places that have health "thrust upon them." That is to say, many a source of debility or disease can be dislodged if only the proper agencies of correction are set to work. A body that is breaking down under neglect or defiance of laws of hygiene can be repaired and restored if its mind is educated and its will energized in the right direction. So, too, a town or countryside where sickness is prevalent, where the death rate is increasing and where property values are declining because of unsanitary conditions, can be lifted out of its misfortune to a firm and prosperous basis if science be given a chance to discover and remove the seat of the troubles.

Georgia, though naturally one of the most healthful regions of the earth, is losing annually millions of dollars and many lives as well because of ignorance or indifference in the matter of conserving health and preventing disease. Here, as in every other State, there is urgent need of arousing the intelligence of the rank and file to the truth that these losses can be turned into gains, that thousands who drag out a languid existence could become vigorous workers, that thousands who die could be saved, and that our productive powers in agriculture, in industry and in all other fields of endeavor could be increased many fold simply by the practical application of knowledge about individual and public health.

To diffuse such knowledge and to stimulate interest in its application will be, as we understand it, the great purpose of Health Week. The meetings in the various towns and cities will be addressed by highly competent speakers on subjects in which every one is concerned. These educational programs are being planned and will be carried out by the Medical Association of Georgia and the State Board of Health, with the aid of the Emory University School of Medicine, the Medical Department of the University of Georgia, the State Tuberculosis Association, the Parent-Teacher Association, and the Woman's Auxiliary to the Medical Association of Georgia. The quality of the work to be done may be inferred from the fact that such institutions are behind it and also from the personnel of its general committee, composed of Dr. T. F. Ambercrombie, Commissioner of Health for the State; Dr. Eugene

E. Murphey, representing the University of Georgia Medical Department, Augusta; Dr. Charles H. Richardson, Jr., Macon, chairman of the committee on scientific work of the association; Dr. Charles E. Waits, Atlanta; Dr. C. W. Roberts, Atlanta; Dr. Glenville Giddings, Atlanta, representing Emory University School of Medicine; Dr. William R. Dancy, Savannah, and Dr. Allen H. Bunce, Atlanta, president and secretary-treasurer of the association, respectively; Mrs. J. D. Miller, Gainesville, president of the Parent-Teacher Association of Georgia, and Mrs. Marion T. Benson, Atlanta, president of the Woman's Auxiliary to the Medical Association of Georgia.

These leaders are entitled to liberal co-operation from every citizen and every group having at heart the State's prosperity and well-being. Health Week, if supported as it deserves to be, will mark a new era of enlightenment and progress for Georgia, will strengthen the sinews of all industry, and make richer the heritage of every child.—Atlanta Journal, February 27, 1930.

## HEALTH WEEK TO BE HELD IN MAY

### *Dr. Dancy Speaks on This at Medical Association Meeting*

A representative group of physicians comprising the First District Medical Association met in a mid-winter session at Millen yesterday, being presided over by the president, Dr. George W. Elarbee, of Daisy.

#### *Attended*

The Savannah physicians on the program were Dr. William R. Dancy, president of the Medical Association of Georgia; Dr. J. W. Daniel, Dr. R. V. Harris and Dr. Chas. Usher. In addition to these, those who attended from Savannah included Dr. Lee Howard, president of the Georgia Medical Society; Dr. Julian Quattlebaum and Dr. R. V. Martin. The meeting was largely attended by physicians from the entire district.

The Woman's Auxiliary to the First District Medical Association held their meeting at Millen also yesterday. Those from Savannah attending included Mrs. W. R. Dancy, Mrs. Julian Quattlebaum, Mrs. William Shearouse, Mrs. Charles Usher, and Mrs. H. H. McGee, Jr.

#### *Auxiliary*

Mrs. Lee Howard, as president of the auxiliary, made an interesting talk which was followed by an address by Dr. W. R. Dancy, who spoke on "The Student Educational Fund." This fund is for use of

Georgia boys who are unable to finance themselves through medical college.

#### *Health Week*

Dr. Dancy discussed at length the program for Health Week, which will be held the first week in May by the Medical Association of Georgia, associated with the State Board of Health, the Parent-Teacher Associations, Emory University School of Medicine, University of Georgia School of Medicine at Augusta, and the Tuberculosis Association. The program will be carried out in 100 cities in Georgia and will deal chiefly with preventable diseases most prevalent in the localities affected.

The Woman's Auxiliary and the members of the Medical Association were entertained at luncheon by the Candler County Medical Society.

The summer session of the First District Association will be held in Savannah and Tybee.—The Savannah Press, February 21, 1930.

## EDITOR COMMENDED

It is a genuine pleasure to commend the fair-minded editor of the Cartersville Tribune-News for his action regarding the advertisements of a certain chiropractor of Cartersville. For several weeks prior to December 12, 1929, he sent regularly to the Tribune-News advertisements captioned, "Compulsory Vaccination Is Unjustifiable." These were accepted and printed in that newspaper until the above date, when the editor explained in an editorial that he had printed the articles only in a spirit of fairness to allow the chiropractor to express his views on the subject of compulsory vaccination, but inasmuch as the views of the advertiser were contrary to the medical and health authorities of the United States, he would print no more of the articles.

Undoubtedly the unethical chiropractor adopted this method of advertising and chose this subject solely to catch the public eye. Possibly he sincerely believes that he is unlikely to contract smallpox in this day of almost universal vaccination, but he cannot deny that this same universal vaccination is the reason for his safety. Had he lived in the time of the great epidemics before Jenner performed the first successful vaccination, he would have been only too glad to be protected from the scourge.



It is a peculiar trait of most chiropractors that they are fond of overstepping the bounds of their vocation. They write and speak and advise about medical subjects when they have no more knowledge of them than the average layman. For instance, in one of the articles referred to above, the following appeared: "Vaccination causes cancer and tuberculosis." What right has a chiropractor to spread this false statement?

I am glad that the editor of the *Cartersville Tribune-News* is co-operating with the public health program and has realized his position in safeguarding the welfare of the people of Georgia.

E. A. B., Jr.

#### PREPARING THICK FILMS FOR DIAGNOSIS OF MALARIA\*

The studies conducted by the United States Public Health Service relating to the prevention and eradication of malaria assume many interesting phases. A recent report of considerable interest issued by the Service is that relating to a method of preparing and examining specimens of blood from a malaria patient on glass slides for the diagnosis of malaria.

Laboratory workers and others interested in the diagnosis of malaria have recognized the advantages of the thick film method, especially for malaria surveys. An assistant may be easily taught to collect good specimens and the method has been used widely and is successfully used in field work. Much time is saved in the examination of specimens. When the malaria parasites are at all numerous they are usually seen in the first thick film; when they are rare they are often detected in the thick film when they might have been missed in a thin film or found only after a long search. The chief purpose of the thick film is, of course, the diagnosis of malaria rather than the study of the characteristics of malaria parasites, a purpose for which the thin film is more suitable.

It is commonly recommended that fifteen to twenty minutes be devoted to a thin film before it is declared negative and five minutes to the thick film. In either case the

time spent on apparently negative specimens must vary with the circumstances. When, for example, the sole purpose is to find a crescent carrier suitable for mosquito-infection experiments, a fraction of a minute will suffice for the thick film. In a clinical case it may be necessary to spend a good deal of time on a film; but here it is usually possible to get a new specimen taken at a time when parasites may appear in larger numbers.

#### NEW TREATMENTS FOR CANCER

In this issue of the *Journal* appears a communication from Drs. Coffey and Humber defining the present status of their method of treating cancer by the use of an extract of the cortex of the suprarenal gland. Also in the Correspondence Department appear statements from several other investigators who have contributed work of interest in this field. Thus, Hanson has had results, closely resembling those described by Coffey and Humber, following the administration of thymus extract. Sokoloff reports similar results following the use of an extract of the suprarenal combined with iron. Charlton announces lytic effects on cancer cells following the administration of an extract of the omentum. Associated with the publicity concerning the Coffey-Humber method of treatment, the *Journal* has received a dozen or more manuscripts describing the use of extracts of hypophysis and other glandular tissues. The interest of the Coffey-Humber method, in its present stage of investigation, lies primarily in the fact that the available evidence seems to demonstrate a definite effect on cancer tissue as the result of injecting suprarenal extract into the body at points removed from the tumor. Such an observation is of scientific interest in that it may provide a significant lead for future investigation pointing toward the development of a specific method in the treatment of cancer. Investigators in medicine have long realized that modern discoveries are the results of the accumulation of investigations over a series of years pointing toward a definite end. As long as work is conducted in good faith and under scientifically controlled conditions, destructive criticism is unwarranted. However, when thousands of sufferers from cancer are led to false hopes, when husbands mortgage homes in order to carry wives with incurable cancer across the continent for experimentation with unestablished methods, the *Journal* must continue to caution physicians and the public.—*Jour. A. M. A.*, March 1, 1930.

\**Health News*, U. S. P. H. S., February 8, 1930.



## MEDICAL FACILITIES IN THE UNITED STATES\*

### *Abstracts*

#### *Physicians*

There are in the United States more physicians per 100,000 people than in any other country in the world. While the number of doctors has not been increasing as rapidly as has the population, it does not follow necessarily that there is, or will be, an inadequate supply. Improved transportation, the growth of office practice, and many other changes may have more than counterbalanced the decreased ratio of physicians to population.

Various state surveys show clearly that the larger cities are over-supplied with doctors relative to population, whereas smaller towns and rural districts are relatively under-supplied. Comparatively few recent graduates of medical schools are located in the small communities; the proportion settling in the larger cities is becoming progressively greater.

Over 19,000 doctors in the United States limit their practice to a special field of medicine. There are 20,000 others practicing a specialty, but not limiting themselves to it. The tendency towards complete specialization is particularly marked in cities larger than 25,000.

The number of physicians employed full-time on a salary basis, including those in governmental service, is, according to one estimate, at least 11 per cent of all active doctors in the country.

#### *Dentists*

Dentists have increased rapidly since 1900, there being over 67,000 in the United States at present. They are unevenly distributed over the country—some urban centers have one dentist to every 500 people, while some rural communities have only one dentist to every 4,000 people.

#### *Nurses*

There are approximately 200,000 graduate registered nurses in the country at the present time. About 152,000 practical nurses were reported in 1920 by the census. In

regard to the supply of registered nurses, the Committee on the Grading of Nursing Schools states, "While many positions for nurses remain unfilled, there is no lack of applicants. The shortage is not in quantity, but in quality."

#### *Some Other Groups*

When one is ill, what are the various choices open for professional service? In the nation there are 143,000 doctors of medicine and about 32,000 other practitioners who take charge of cases. These include chiropractors, osteopaths, naturopaths, and Christian Scientists. At least 55,000 women, chiefly in the Southeastern States, practice midwifery, many of them, however, on a part-time basis.

#### *Hospitals*

Hospital beds have increased from 421,000 in 1909 to 890,000 in 1928. There are 7,000 hospitals in the United States and each day, on the average, they care for about 700,000 patients. The general hospitals and those for nervous and mental patients comprise well over three-fourths of the total bed capacity.

Of the entire bed capacity of the country, considerably over one-half is provided by the federal, state and local governments; over one-quarter is provided by non-profit organizations for public service, controlled by independent boards of trustees, churches, and other bodies. The remaining small proportion of beds are in proprietary hospitals, mostly of small size, set up as business enterprises under the ownership of individuals or corporations.

#### *Clinics, Health Centers, and Other Institutions*

There has been a rapid growth of clinics, from about 600 in 1910 to almost 6,000 in 1926. These clinics are maintained by hospitals, governmental and private health organizations, industrial and commercial establishments, schools and colleges, trade unions, courts and prisons, and charitable agencies.

#### *Governmental Agencies*

With the general increase in its activities and powers, the modern state has assumed an increasingly important role in maintain-

\*Publication Number 3, The Committee on the Cost of Medical Care. Washington, D. C.

ing public health. It is noteworthy that, among their other functions, federal, state and local governments controlled hospitals which in 1927 rendered 70 per cent of all hospital service in the United States. These, of course, include large institutions for mental, tuberculous, and other special groups of patients, as well as some general hospitals.

The city or county health department is the primary unit for administering official public health services. Health officers were employed on a full-time basis, in 1928, by 354 of the 824 cities in the United States with over 10,000 population. Of about 2,500 counties, wholly or in large part rural, 414 at the beginning of 1928 had health departments with one or more health officers on a full-time basis.

## HEALTH EDUCATION WEEK

May 5-10, 1930

### *News From Local Committees*

#### BARROW COUNTY

Dr. W. L. Mathews, Winder, Chairman; Drs. R. C. Cross, Winder; L. P. Pharr, Auburn; E. R. Harris, Winder.

#### BARTOW COUNTY

Dr. H. C. Pearson,\* Cartersville, Chairman; Drs. W. E. Wofford and A. L. Horton, both of Cartersville.

\*We want to do something that will be beneficial and shall confer together and decide what to do.

#### BIBB COUNTY

Dr. R. C. Goolsby, Jr., Macon, Chairman; Drs. C. L. Ridley and J. D. Applewhite, both of Macon.

#### BLUE RIDGE COUNTY

Dr. C. B. Crawford, Blue Ridge, Chairman; Drs. J. M. Daves, Blue Ridge; E. L. Prince, Morganton.

#### BURKE RIDGE

Dr. W. R. Lowe, Midville, Chairman; Drs. H. F. Bent, Midville; W. C. McCarver, Vidette; R. L. Miller, Waynesboro; W. W. Hillis, Sardis.

#### CARROLL COUNTY

Dr. D. S. Reese,\* Carrollton, Chairman: \*Am writing parties at two places to get their opinion of Health Education Week and would like to hear from them before giving you a list of committees. Think it may be

wise on Friday night of that week to have lectures that will suit the school children.

#### CHATTOOGA COUNTY

Dr. H. D. Brown,\* Summerville, Chairman: \*Will send you the names of the committee and a list of subjects as early as I can call a meeting of the officers of the Parent-Teacher Associations who will aid me in carrying out the program.

#### CHEROKEE COUNTY

Dr. Grady N. Coker, Canton, Chairman; Drs. George C. Brooke, Canton; J. R. Boring, Canton; J. P. Turk, Nelson.

#### COBB COUNTY

Dr. L. L. Welch, Marietta, Chairman; Drs. J. E. Lester, Kennesaw; W. H. Perkinson, Marietta; Ralph W. Fowler, Marietta.

#### COOK COUNTY

Dr. W. M. Shepard, Adel, Chairman; Drs. W. H. Clements, Adel; L. R. Hutchinson, Adel; J. C. Thomas, Adel.

#### CRISP COUNTY

Dr. J. N. Dorminy, Cordele, Chairman; Drs. M. R. Smith, Guy G. Lunsford, T. J. McArthur, and Charles Adams, all of Cordele.

#### DOUGHERTY COUNTY

Dr. I. M. Lucas, Albany, Chairman; Drs. J. M. Barnett, F. K. Neill, N. R. Thomas, Hugo Robinson, all of Albany.

#### EMANUEL COUNTY

Dr. R. C. Franklin, Swainsboro, Chairman; Drs. J. R. Dykes, Swainsboro; V. E. Franklin, Graymont; A. C. Johnson, Garfield; S. S. Youmans, Oak Park; W. H. Lucas, Stillmore.

#### EVANS COUNTY

Dr. S. T. Ellis,\* Claxton, Chairman: \*Am willing to help out. Kindly advise me further what I am expected to do.

#### FLOYD COUNTY

Dr. M. M. McCord,\* Rome, Chairman; Drs. B. V. Elmore and E. J. Radcliffe, Rome.

\*The responsibility is up to the physicians of Georgia to arouse the people of the state to the great importance of an annual checking up of their physical status as a means of health conservation.

#### FORSYTH COUNTY

Dr. J. A. Otwell, Cumming, Chairman.

#### FULTON COUNTY

Dr. C. W. Roberts, Atlanta, Chairman.

## GORDON COUNTY

Dr. Z. V. Johnston, Calhoun, Chairman; Drs. W. R. Richards, Calhoun; J. M. Erwin, Calhoun; W. R. Barnett, Calhoun.

## GRADY COUNTY

Dr. J. V. Rogers, Cairo, Chairman; Drs. Berry and J. B. Warnell, Cairo.

## HANCOCK COUNTY

Dr. C. S. Jernigan, Sparta, Chairman; Drs. H. L. Earl, Sparta; A. S. Cooper, Mayfield; Mr. W. W. Driskell, Sparta.

## HOUSTON-PEACH COUNTIES

Dr. J. H. Riley,\* Perry, Chairman; Dr. R. L. Cater, Perry; Prof. Sam Gardner, Perry; Mrs. H. P. Dobbins, Perry.

\*This matter of holding health clinics will do more for the betterment of health conditions in Georgia than any other one thing could do in ten years.

## JACKSON COUNTY

Dr. J. C. Bennett, Jefferson, Chairman; Dr. A. A. Rogers, Commerce; Dr. H. E. Crow, Talmo.

## JASPER COUNTY

Dr. E. M. Lancaster, Shady Dale, Chairman; Drs. J. F. Anderson, Hillsboro; F. S. Belcher, Monticello; J. A. Brown, Shady Dale; R. F. Cary, Monticello; L. Y. Pittard, Monticello.

## JEFFERSON COUNTY

Dr. S. T. R. Revell,\* Louisville, Chairman: \*Service to humanity should be the motivating force of every physician's existence and the field of preventive medicine offers wonderful opportunity of exemplifying this service.

## JENKINS COUNTY

Dr. C. Thompson,\* Millen, Chairman; Dr. S. H. Haddock, Millen; Health Committee from Woman's Club; Miss Thomas, Health Nurse.

\*We want to put on moving pictures and lectures. It is planned to put on this demonstration, not only in Millen, but in all the various schools throughout the county. We expect to have a pageant put on by all the schools.

## JOHNSON COUNTY

Dr. H. B. Bray, Wrightsville, Chairman; Drs. J. A. Meeks, Kite; J. G. Carter, Scott; Byrom Price, Wrightsville; Miss Bertha Bethea, Wrightsville, Home Demonstration Agent.

## LAMAR COUNTY

Dr. J. M. Rogers,\* Barnesville, Chairman; Drs. J. A. Corry, C. E. Suggs, and C. H.

Willis, all of Barnesville; Dr. J. M. F. Barron, Milner; Mrs. W. T. Summers, J. A. Cason, J. E. Bush, and Grady Dumas, all of Barnesville; Mrs. Bert Abernathy, Gogginville; Mrs. Robert Collier, and Miss Ethel Drewry, of Milner, all presidents of women's clubs of the county to act as ex-officio members.

\*The possibilities for good in this movement as outlined by our president are great. Our committee will endeavor to make the most of this opportunity.

## LOWNDES COUNTY

Dr. B. G. Owens, Valdosta, Chairman; Dr. G. T. Crozier, Valdosta, Commissioner of Health, Lowndes County.

## MACON COUNTY

Dr. C. P. Savage, Montezuma; Drs. Chas. A. Greer, Oglethorpe; D. B. Frederick, Marshallville; H. C. Derrick, Oglethorpe.

## MONROE COUNTY

Dr. J. O. Elrod, Forsyth, Chairman; Drs. R. C. Goolsby, G. H. Alexander, B. L. Smith, all of Forsyth; W. J. Smith, Juliette.

## MORGAN COUNTY

Dr. D. M. Carter, Madison, Chairman; Drs. W. C. McGeary, Madison; J. L. Porter, Rutledge.

## MONTGOMERY COUNTY

Dr. J. E. Hunt, Mount Vernon, Chairman; Drs. J. W. Palmer, Ailey; W. M. Moses, Uvalda; H. C. Sharpe, Alston; J. H. Dees, Alston.

## MURRAY COUNTY

Dr. E. H. Dickie, Chatsworth, Chairman; Drs. R. H. Bradley, Chatsworth; J. E. Bradford, Spring Place.

## MUSCOGEE COUNTY

Dr. H. J. Bickerstaff, Columbus, Chairman.

## PIKE COUNTY

Dr. M. M. Head, Zebulon, Chairman; Dr. J. H. Grubbs, and President of Woman's Club, Molena; Dr. R. A. Mallory, and President of Woman's Club, Concord; Dr. I. B. Howard and officers of Parent-Teacher Association, Williamson; Dr. D. L. Head, and President of Woman's Club, Meansville; J. R. Graves, and President of Woman's Club, Zebulon.

## RABUN COUNTY

Dr. J. A. Green, Clayton, Chairman; Dr. J. C. Dover, Clayton; Dr. L. Neville, Dillard; Prof. E. N. Reynolds, Clayton; S. F. Ledford, Dillard; Prof. C. L. Harrell, Rabun.



## RANDOLPH COUNTY

Dr. G. Y. Moore,\* Cuthbert, Chairman; Drs. W. W. Crook, W. G. Elliott, J. C. Patterson, Annette McD. Saurez, D. L. Smith, and C. E. Wade, all of Cuthbert; A. L. Crittenden, F. M. Martin, E. C. McCurdy, T. S. Saxon, A. F. Weathers, all of Shellman; W. W. Binion, Benevolence; Loren Gary, Georgetown; T. F. Harper, H. R. Ingram, F. S. Rogers, and J. L. Shepard, all of Coleman; William C. Wimberly, Fort Gaines.

\*Greatest innovation that has been sponsored by the various medical organizations in Georgia.

## SCREVEN COUNTY

Dr. H. W. Doster, Rocky Ford, Chairman; Drs. J. C. Cail, Sylvania; E. E. Downing, Newington; W. E. Rushing, Milhaven.

## SPALDING COUNTY

Dr. W. C. Humphries,\* Griffin, Chairman; Drs. H. W. Copeland and K. S. Hunt, Griffin.

\*We realize the necessity of educating the people along the lines of sanitation, annual physical examinations, and preventive medicine. We will aid in every way possible to make Health Education Week a success.

## STEPHENS COUNTY

Dr. C. L. Ayers, Toccoa, Chairman; Drs. E. F. Chaffin, Alexander Craig, Jeff Davis, J. H. Edge, W. B. Heller, J. E. D. Isbell, J. H. Terrell, all of Toccoa; W. H. Swain, Martin; Prof. J. B. Cheatham, Toccoa; Mrs. H. D. Meaders, Toccoa; Mrs. John Crawford, Toccoa, and Prof. D. D. Still, Eastanollee.

## SUMTER COUNTY

Dr. H. M. Tolleson,\* Smithville, Chairman; Drs. J. W. Chambliss, R. C. Pendergrass, and W. H. Houston, Americus; E. L. Forrester, Attorney, Leesburg; J. E. Pinkston, Smithville. Officers of Parent-Teacher Associations as follow: Mrs. J. E. Daniell, Americus; Mrs. Tom Wells, Americus; Mrs. J. C. Logan, Plains; Mrs. R. P. Isreal, Smithville; Mrs. J. M. Summerford, Leslie; Mrs. J. L. Chambliss, Americus, and Mrs. A. G. Pennington, Andersonville.

\*Please advise how I may be of further service in putting across this worthy movement, and be assured that the Sumter County Medical Society is back of it in every way.

## TELFAIR COUNTY

Dr. C. J. Maloy, Helena, Chairman.

## THOMAS COUNTY

Dr. Arthur D. Little, Thomasville, Chairman; Drs. S. E. Sanchez, Barwick; J. A.

Garrett, Meigs; R. F. Bell, Boston; H. B. Jenkins, Thomasville.

## TURNER COUNTY

Dr. J. H. Baxter, Ashburn, Chairman; Drs. W. J. Turner, F. W. Rogers, W. L. Story, all of Ashburn; H. M. Belflower, Sycamore; R. D. Rawlins, Rebecca.

## WALKER COUNTY

Dr. J. H. Hammond, LaFayette, Chairman.

## WARE COUNTY

Dr. W. L. Pomeroy, Waycross, Chairman; Drs. George E. Atwood and B. H. Minchew, Waycross.

## WAYNE COUNTY

Dr. A. J. Gordon,\* Jesup, Chairman; Drs. J. Lawton Tyre, Screven; I. K. Ogden, Odum, and F. C. Story, Jesup.

\*We expect to do all in our power to make Health Education Week a success.

## WASHINGTON COUNTY

Dr. B. L. Helton,\* Sandersville, Chairman; \*Will be glad to co-operate in this work and furnish as many as necessary on the committee. Can put on as many as five public meetings in the county.

## WHITFIELD COUNTY

Dr. E. O. Shellhorse,\* Dalton, Chairman; Drs. H. J. Ault, H. L. Erwin, and Miss Beulah Carrington, all of Dalton.

\*The entire membership of the Whitfield County Medical Society appears anxious to lend their assistance and co-operation to this work. We hope to accomplish some real benefit.

## WILKES COUNTY

Dr. H. T. Harriss, Washington, Chairman; Drs. L. R. Casteel, Metasville; L. M. Ellis, Washington; R. J. McNeill, Tignall; E. W. Ragsdale, Tignall; H. M. Sale, Rayle; A. W. Simpson, R. A. Simpson, C. E. Wills, and O. S. Wood, all of Washington.

## WORTH COUNTY

Dr. G. S. Sumner, Poulan, Chairman; Drs. J. J. Crumbley, Sylvester; E. D. Ford, Doles; H. S. McCoy, Sylvester; W. W. Sessions, Sumner; W. C. Tipton and J. L. Tracy, Sylvester.

## PARTRIDGE INN

## HEADQUARTERS

Eighty-first Annual Session

MEDICAL ASSOCIATION OF GEORGIA

Augusta,

May 13, 14, 15, 16.

AUGUSTA\*

PARTRIDGE INN  
HEADQUARTERS

EIGHTY-FIRST ANNUAL SESSION  
MEDICAL ASSOCIATION OF GEORGIA

May 13, 14, 15, 16, 1930

THE REASON WHY

we call Augusta the "Garden City of the South" is because in the number of artistic homes with beautiful gardens she easily stands first. Retaining all her distinctive flavor of the best traditions of the old Southern days, Augusta is yet more progressive than any other Southern City in the development of her beautifully landscaped gardens and the building of her livable homes.

This city is also unique in that she is claimed as home in winter by citizens of East and North and South—as well as by thousands who live all the year in the homes built or made by generations long since gone.

As long ago as in the days of the Cherokee Nations, when roaming Indians in their moccasined feet, lightly trod the winding trails of the pine forests, the principal Trading Post of the Seven Nations was at the Falls of the Savannah River, where the City of Augusta, Georgia, still stands.

As long ago as in the days of the very earliest adventurers, Ferdinand de Soto, as he tells us in his Journal, in 1540, met and loved the beautiful Indian Queen of the tribal village of Cutafachiqui, site of which is just a few miles below Augusta on the Savannah River.

Here General Oglethorpe, in 1735, met and parleyed with the heads of the Indian Tribes, Choctaws, Seminoles, Creeks and Cherokees.



Here, William Howard Taft, after his election as President of the United States, met and organized his Cabinet.

Here, Woodrow Wilson spent his boyhood days and visited as a man and a President.

So, from centuries afar to the days that are near, Augusta, at the Falls of the Savannah, where the Sand Hills of the Atlantic beaches have reached up to meet the foot hills of the Alleghanies has been the meeting place, the playground, and the home of famous men—and, as is usual where such men are—of beautiful and charming women.

There must be a reason for this choice.

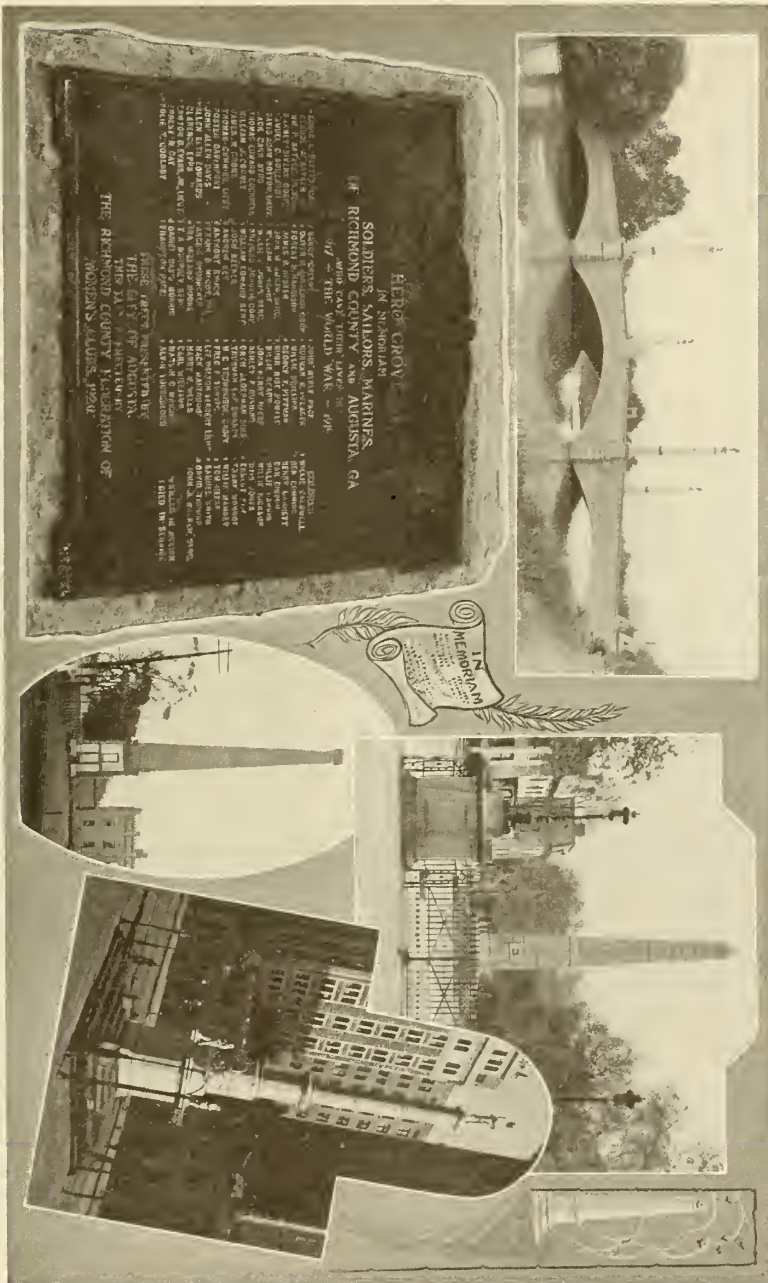
It is found in the climatic, geographic, and meteorological situation. The sunshine that has made Augusta famous is just the same as the sunshine of less popular cities, but in Augusta it shows itself more consistently and with greater regularity than it does elsewhere.

*Picturesque Drives*

To one wishing to get away from the busy marts of the world and seek that quiet charm,

\*Data and figures furnished by the Chamber of Commerce, Augusta.





# HISTORIC MEMORIALS

Upper left: Archibald Butt Memorial Bridge. (He sank with the Titanic.) Former aide and friend of Presidents Roosevelt and Taft. Lower left: Richmond County's heroes in the World War. Lower center: Chimney of the old Confederate Powder Mill. Upper right: Shaft to the three Georgia signers of the Declaration of Independence. Lower right: Confederate Monument on Broad Street.

which only the great outdoors can offer, what could be more alluring than these picturesque drives through long-needle pines and ancient oaks? Here blooms a riot of wild flowers; here is found one of the finest collections of dogwood trees. At the time of their profuse blooming, April, one has the sensation of standing in a snow storm beneath the pines, and yet the surrounding country is blooming in spring flowers. Here bridle paths for horse-

back riding, with romance in every mile, tempt the lover of this sport.

These roads skit a rippling lake, where the swan and duck disport themselves in the sparkling sunshine of Georgia, that delight invigorating sunshine of this section that makes driving, horseback riding and other sports a joy.

The approach to these drives is through Forrest Hills, one of the exclusive suburban residential sections.



## WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

President—Mrs. Marion T. Benson, Atlanta.  
 President-elect—Mrs. Chas. C. Harrold, Macon.  
 1st Vice-President—Mrs. J. A. Selden, Macon.  
 2nd Vice-President—Mrs. H. D. Allen, Sr.,  
 Milledgeville.  
 3rd Vice-President—Mrs. J. A. Redfearn, Albany.  
 Recording Secretary—Mrs. Lee Howard, Savannah.  
 Corresponding Secretary—Mrs. W. H. Garrison,  
 Clarkesville.

Treasurer—Mrs. Chas. E. Waits, Atlanta.  
 Parliamentarian—Mrs. J. E. Penland, Waycross.  
 Editor—Mrs. C. W. Roberts, Atlanta.

### DELEGATES TO A. M. A. (1930)

Mrs. William R. Dancy, Savannah.  
 Mrs. C. C. Hinton, Macon.

### DELEGATES TO S. M. A., MIAMI

Mrs. J. Cox Wall, Eastman.  
 Mrs. Ralston Lattimore, Savannah.

## MESSAGE FROM THE PRESIDENT

*To Members of Woman's Auxiliary,*

*Medical Association of Georgia:*

The most important work of the Woman's Auxiliary to the Medical Association of Georgia is the Students' Educational Fund, which has been started by the loan of \$300 to a Freshman Medical Student at Emory University this year. It is very necessary that each county organization contribute to this fund, and we are looking forward to a hearty response in order that the work may go forward for the coming year. Contributions may be mailed to Mrs. Chas. E. Waits, 1105 Lullwater Road, Atlanta.

Another objective is the work of the Health Film Library. Each county auxiliary should assume the responsibility of planning during the year a health program, using one or more health films. Mrs. J. A. Selden, Macon, Ga., is chairman of this committee.

The editor wishes to call attention of county auxiliaries to a recommendation made by the past state editor, Mrs. William H. Myers, that after the annual meeting of county auxiliaries, which should be in January of each year, a written report be sent not later than the 15th of February to the state editor for the Year Book. Another recommendation passed at the last annual meeting was the payment of a registration fee of \$1.00 at annual meetings.

Are you emphasizing in your meetings the main objective as laid down by the A. M. A. Auxiliary, viz., the co-operation of your members in those organizations which look to the advancement of health and health education? Are there members of each local auxiliary who are members also of a Parent-Teacher organization, or of clubs affiliated with the Federation of Women's Clubs, or the Auxiliary to the American Legion, or other organizations which do preventive health work? Auxiliary women should be

members of the health department committees of the above mentioned organizations.

### *Special Notices*

State dues, seventy-five (75c) cents per capita should be sent to Mrs. Chas. E. Waits, 1105 Lullwater Road, Atlanta; also a complete list of your membership, designating your officers. Will be glad to have this information as early as is convenient.

Mrs. C. W. Roberts, 1085 St. Charles Place, N. E., Atlanta, is editor of our page in the State Medical Journal. Send her anything of interest in your work; also the report of your meetings. Be sure to see our page each month.

Wishing you very much success and a prosperous year, I am

Yours very sincerely,

MRS. MARION T. BENSON,

President Woman's Auxiliary, Medical Association of Georgia.

## BIBB COUNTY AUXILIARY

The Auxiliary to the Bibb County Medical Society regrets that its report is little more than half completed since no change has yet been made in the fiscal year, which was begun in June. However, the report up to the present time the Auxiliary submits with some pride.

The year's work was begun enthusiastically with a contribution to the Educational Fund for Medical Students. This course of endeavor met with so much interest from the entire membership that it was later extended when the urgent and immediate need of a student at the University of Georgia Medical Department, son of a Georgia physician, was brought to the attention of the Auxiliary. The young man's genuine worthiness having been fully realized, it was voted to accept the entire financial responsibility of the student's last two terms of this year.

This has been the third year the Auxiliary has continued the monthly allowance to the young woman, daughter of a late physician, who is in training at the Macon Hospital; taking pleasure also in adding to her Christmas needs. The same young nurse was given by the Auxiliary a week's benefit at the Y. W. C. A. camp during the past summer.

The Hospital Committee has been very active, visiting all the wards regularly. The children's ward remains the apple of all the eyes of our members, and the play-room, which was furnished and is maintained by the Auxiliary, is its very core. A toy shower was given in December for the room and afforded much cheer to the little unfortunates. Bathrobes in all sizes, which were made by individual members, and bedroom slippers were furnished the children's ward.

Feeling the unusual distress of the community at Christmas time, the Auxiliary went outside its usual sphere of activities, which is linked closely with those associated with or things relative to medicine, and provided two families with necessary food and clothing.

These activities have been made possible by the annual card party and the very zealous work of every member at the sandwich booth which has become an annual event at the Bibb County Fairs.

Regular meetings have been held on the first Friday of each month. With cordial invitations from the members, all the meetings have been held in private homes. The business sessions have been followed each time with delightful teas, strengthening, we feel, the valuable bonds of friendship.

The Auxiliary to the Bibb County Medical Society reports five new members in the year 1929-1930, making a total enrollment of thirty-nine members in good standing.

Respectfully submitted,

MRS. BENJ. BASHINSKI,

President, Woman's Auxiliary to Bibb County Medical Society.

Macon, Ga., February 12.

## DOOLY COUNTY AUXILIARY

The Woman's Auxiliary to the Dooly County Medical Society met in Byromville at the residence of Mrs. E. B. Davis, president.

The Students' Educational Fund was discussed and the members contributed. Plans are being formulated to have silver teas and benefit bridge parties to raise more money for this fund. Health films will be put on at the Vienna Theater to raise additional funds.

The Auxiliary co-operates with the School

Improvement Club and the Parent-Teacher Association for the advancement of health and health education.

New subscriptions were secured for Hygiea.

Our next meeting will be held at Pinehurst in April. The district meeting will be held in June at Vienna.

MRS. O. W. KITCHENS,

Secretary-Treasurer.

Byromville, Ga., February 14.

## OFFICIAL HEALTH PROGRAM

OF THE

WOMAN'S AUXILIARY

OF THE

AMERICAN MEDICAL ASSOCIATION

### I. PUBLIC HYGIENE.

Fundamentals upon which Auxiliary work for improvement of public hygiene should be based:

- (1) *Recognition of the fact that public health work is a highly technical job, requiring scientific, technically trained workers. That health work undertaken by lay women with no knowledge of the public health problem as a whole is necessarily fragmentary and ineffective.*
- (2) *Recognition of the fact that every state, county and city is entitled to a scientific full-time health department (organized not to treat the sick, but to prevent disease and promote health), adequately financed, free from political domination, and providing continuity of service to a trained personnel so long as work is efficient.*
- (3) *Recognition of the fact that the first and most fundamental job for lay organizations like the Auxiliary is to secure such scientific full-time health departments and adequate health protection, in their state, their county, their city or town.*
- (4) *Recognition of the fact that where efficient, full-time, scientific health departments do not exist (and only about ten per cent of the rural districts of the United States have anything approaching adequate health protection), health activities must be initiated and carried on by volunteer unofficial agencies; but that all such work should be so planned and administered as to serve as stepping-stones toward the full-time official health department, and that when the full-time health department, with workers trained for public health work, has become an accomplished fact, lay organizations should support and cooperate with the official workers and should be willing to take orders from them.*
- (5) *Recognition of the fact that no health department, state, county or city, can do effective work without intelligent cooperation of the public; that such public cooperation depends upon wide-spread health education; that lay organizations can do this educational work, and*

are needed for it; and that the Auxiliary can be one of the most valuable tools for an official health department to use in this work, because it can by its education of the public concerning the official health departments work and needs, be the means of gradually eliminating or preventing political interference with an efficiently working department, and thus insure to it uninterrupted public service.

Most volunteer agencies do not yet realize the waste-fulness of their individualistic efforts. One of the first things the Auxiliary should do is to work for a change of attitude in other volunteer women's organizations.

Health officials know that it is not always the work which makes the greatest emotional appeal to the public which most needs to be done. Unfortunately most women do not know this. This is something the doctors' wives might well undertake to teach other women.

The National Auxiliary recommends, therefore, that each State Auxiliary undertake, under the direction and with the help of the Public Health Committee of the State Medical Association and of its Advisory Council a study *first of all* of the fundamental principles of health promotion and disease prevention; second, of the set-up considered essential by public health experts for an effective state health department, of qualifications of personnel, adequate budget, and the like; and third, of the state health conditions; that it devise means of acquainting all the state board members with the result, and that recommendations for educational work by the county Auxiliaries be based upon the conditions found.

In states where all is well and where time has developed good official health machinery and good health conditions, general knowledge of the fact will tend to prevent interruption of the excellent work, and will be a source of satisfaction to the women of the state.

In those states where there is much yet to be done, this investigation will indicate what sort of work needs doing first. For example:

- (a) In those states which are not in the Birth Registration Area, the Auxiliaries would, without doubt, wish to tackle, as their first job, the ninety per cent birth registration problem.
- (b) In those states in which the state health department believes the "County Health Unit" to be the solution of the rural health problem, the county auxiliaries should be encouraged to take as their chief work such persistent and widespread education of the public as will gradually create a general demand for the full-time county health department.
- (c) In those states where the rural health work is directly done "long distance" by the state health department, the county auxiliaries, if willing to work, and work under the directions of the state health department, can carry on intensive local health education work which

would be impossible for the state department without intelligent local cooperation.

To those auxiliaries which agree with these ideas the committee recommends the following outline of study:

- (1) Vital Statistics. Their value.  
Compare the vital statistics of the state with those of other states.  
Compare the vital statistics of the different counties of the state.  
Compare the vital statistics of the cities with other cities in the state, and in the United States.
- (2) The State Health Department; its organization; and program:  
(a) For general state work.  
(b) For cooperating with the counties in improving county health conditions.
- (3) The Value of the Public Health Nurse.
- (4) The County Health Unit as a possible solution of the rural health problem.

#### *Community-wide Conditions Which Affect Health.*

- (5) Milk:  
Milk standards, why necessary, what milk standards your community needs. How are these needs being met?
- (6) Housing:  
Your community housing laws.  
Housing conditions as they have developed under these laws and as they affect health.  
Improvements needed.
- (7) General Sanitation and its relations to the death and morbidity rates.  
Sewage disposal.  
Water.  
Garbage.  
Flies.  
Dust and street cleaning, etc.

#### II. PERSONAL HYGIENE.

The improvement of personal hygiene in any community is almost entirely a matter of education. Here again the Auxiliary members must first educate themselves before they can take a safe part in educating the public. The committee therefore recommends that the Auxiliary study programs shall include such subjects as:

- Health Promotion:
- Prenatal care.
  - Child Welfare—infant and pre-school hygiene.  
School hygiene.  
Mental hygiene.  
Social Hygiene.
  - The advantage to the public of general compliance with health regulations.
  - The periodic health examination.
  - Control of communicable diseases.

The entire program should close with a survey of all the private agencies doing health work in the community, and a discussion of the possibility and desirability of centering the direction of all such work in a full-time, scientific health department, under which the private agencies, while still maintaining their identity, would work in complete cooperation.



## SECOND DISTRICT MEDICAL SOCIETY SEMI-ANNUAL MEETING

The meeting was called to order at 10:30 o'clock by the president, Dr. H. M. Moore.

The invocation was delivered by Rev. T. F. Callaway and a short word of welcome to the visiting physicians was offered by Dr. Moore.

The minutes of the last meeting were then read by the secretary and were approved as read, after which the scientific program was immediately entered into.

### *Scientific Program*

The first paper on the program, "The Treatment of Acute Lobar Pneumonia," was read by Dr. E. C. Smith, of Donalsonville. This paper was thoroughly enjoyed and appreciated by all present, as was evidenced by the number taking part in the discussion.

"Surgery of the Biliary Tract" was the title of the second paper, which was presented by Dr. Lon Grove, of Atlanta. Dr. Grove spoke without manuscript and illustrated his talk with lantern slides and appropriate anatomical charts which added very much to the interest and value of the paper. Being a visitor, Dr. Grove's paper was not open to discussion, but he was given a vote of thanks by the society for coming before us at this time.

The third paper, "Perinephritic Abscess," by Dr. C. H. Watt, of Thomasville, was presented at this time. This paper was discussed by Dr. Lon Grove, of Atlanta.

Dr. H. E. Palmer, of Tallahassee, Fla., responded to a special invitation to read before the society a paper which he had previously read at the Second Florida District meeting in Tallahassee. This paper told of interesting cases which had developed in the practice of the writer during some thirty-eight years of practice. This was a most interesting, and we might say an unusual, paper for present-day medical meetings. It gave the younger men of the society some idea of the conditions and difficulties under which the older members of the profession labored in their earlier days. Dr. Palmer was heartily thanked by the society for his willingness to read the paper at this time.

The following committee was appointed for the purpose of determining the next place of meeting and for choosing the members of the society to read papers at the next meeting:

Dr. J. A. Redfearn, Albany  
Dr. Gordon Chason, Bainbridge  
Dr. J. V. Rogers, Cairo

The meeting adjourned for luncheon, which was served on the grounds of the

hospital by the nurses and was in charge of the dietitian.

After the luncheon the meeting was continued by a report from the district counselor, Dr. J. A. Redfearn, who reported the District to be in good condition and failed to get 100 per cent membership in the State Society by only a few members. The society was invited to the Chattahoochee Valley meeting in Albany.

Following this, a report by Dr. William Dancy, president of the State Association, was rendered. In this report Dr. Dancy outlined the policies of the present administration and what it had accomplished and what it hoped to accomplish before the end of the year. He urged upon everyone to support the State Association, to attend its meetings and also to aid the Woman's Auxiliary.

Following this, Dr. Julian Gammon, of Jacksonville, Fla., held a clinic on medical cases. The first case was one of Coronary Artery Thrombosis, the second Angina Pectoris, and the third that of a young boy with rheumatic fever and a resulting cardiac lesion. The clinic was one of unusual interest to those present and was somewhat different from the usual program in our society and it is to be hoped that perhaps in the future it will be possible to arrange for more of these clinics as it is felt that perhaps the doctors will derive more benefit from this sort of a meeting than they do from the usual papers.

Owing to the lack of time, we were unable to hear from Dr. Abercrombie of the State Board of Health and Dr. Moore of Cuthbert, president-elect of the State Society. It was indeed a pleasure to have them with us.

The following report was then made by the Program Committee:

Place of Meeting—Albany, Ga.

Papers to be read:

Surgery—Dr. A. D. Little, Thomasville, Ga., with alternates Drs. Chason and Keaton.

Medicine—Dr. J. A. Redfearn, Albany, Ga., with alternates Drs. Hill and Edmondson.

Pediatrics—Dr. W. L. Wilkinson, Bainbridge, Ga., with alternates Drs. Cheshire and Bell.

It was decided by those present at the business meeting in the afternoon to try in the future having the meetings in the afternoon and evening. It has been noticed by members of this society that other societies holding their meetings in the afternoon and evening have better attendance. Therefore, it was decided to change the time of meeting from morning to afternoon.

CHAS. H. WATT, M. D., *Secretary*.  
Thomasville, Ga., Oct. 11, 1929.

### FIFTH DISTRICT MEDICAL SOCIETY MEETING

The regular spring meeting of the Fifth District Medical Society will be held at the Academy of Medicine, 38 Prescott Street, Northeast, Atlanta, Ga., at 8 o'clock p. m., Wednesday, April 30. We are very happy to announce that the speaker of the evening will be Dr. Irving W. Potter, of Buffalo, N. Y. Dr. Potter is a noted obstetrician and his remarks will be in that field. Every ethical physician in the State of Georgia is cordially invited to attend this meeting.

M. T. HARRISON, M. D.,  
Secy. Fifth District Medical Society,  
Atlanta, Ga.

### COUNTY SOCIETIES

#### 1930 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 5, 1929.
2. Barrow County, Dr. W. L. Mathews, Winder, December 5, 1929.
3. Dougherty County, Dr. I. M. Lucas, Albany, December 28, 1929.
4. Lamar County, Dr. J. M. Rogers, Barnesville, January 6, 1930.
5. Turner County, Dr. J. H. Baxter, Ashburn, February 10, 1930.
6. Monroe County, J. O. Elrod, Forsyth, February 18, 1930.

\*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

#### NEW MEMBERS FOR 1930

Ansley, H. G., Decatur.  
Cason, H. B., Jr., Warrenton.  
Eubanks, Geo. F., Atlanta.  
Hardman, W. W., Elberton.  
Harris, V. L., Pinehurst.  
Hobby, A. Worth, Atlanta.  
Johnson, W. A., Bowman.  
Joiner, Hartwell, Gainesville.  
Kennedy, H. T., Warrenton.  
Langston, M. F., Milledgeville.  
Murphy, F. B., Canton.  
Poer, D. Henry, Atlanta.  
Prince, E. L., Morganton.  
Rhamy, Arthur P., Emory University.  
Rubins, S. N., Macon.  
Schwoll, E. W., Milledgeville.  
Sewell, W. A., Rome.  
Stewart, W. K., Louisville.

Members of the Richmond County Medical Society and the Woman's Auxiliary are making extensive preparations to entertain all physicians and their wives who attend the Augusta meeting, May 13-16.

### COUNTIES REPORTING FOR 1930

#### BIBB COUNTY MEDICAL SOCIETY

Bibb County Medical Society announces the following officers for 1930:

President.....J. D. Applewhite, Macon  
Vice-President.....J. Fred Adams, Macon  
Secretary-Treasurer.....R. C. Goolsby, Jr., Macon  
Delegate.....Wallace Bazemore, Macon  
Delegate.....Chas. C. Hinton, Macon  
Censors—Wallace Bazemore, F. L. Webb, and O. H. Weaver.

#### BLUE RIDGE MEDICAL SOCIETY

Blue Ridge Medical Society announces the following officers for 1930:

President.....J. M. Daves, Blue Ridge  
Vice-President.....E. L. Prince, Morganton  
Secretary-Treasurer.....C. B. Crawford, Blue Ridge  
Censors—W. H. Rogers, E. L. Prince, and C. B. Crawford.

#### DOOLY COUNTY MEDICAL SOCIETY

Dooly County Medical Society announces the following officers for 1930:

President.....R. H. Pate, Unadilla  
Vice-President.....W. N. Edenfield, Vienna  
Secretary-Treasurer.....F. E. Williams, Vienna  
Delegate.....V. C. Daves, Vienna  
Alternate.....E. B. Davis, Byromville  
Censors—V. C. Daves, H. A. Mobley, and O. W. Kitchen.

#### WILKES COUNTY MEDICAL SOCIETY

Wilkes County Medical Society announces the following officers for 1930:

President.....L. M. Ellis, Washington  
Vice-President.....H. M. Sale, Rayle  
Secretary-Treasurer.....H. T. Harriss, Washington  
Delegate.....H. T. Harriss, Washington  
Alternate.....C. E. Wills, Washington  
Censors—L. R. Casteel and E. W. Ragsdale.

#### CHEROKEE COUNTY MEDICAL SOCIETY

Cherokee County Medical Society announces the following officers for 1930:

President.....John P. Turk, Nelson  
Vice-President.....Wm. O. Rhodes, Holly Springs  
Secretary-Treasurer.....George C. Brooke, Canton  
Delegate.....D. H. Garrison, Tate  
Alternate.....Grady N. Coker, Canton  
Censors—M. G. Hendrix, J. T. Pettit, and T. J. Vansant.

#### OCMULGEE MEDICAL SOCIETY

Ocmulgee Medical Society announces the following officers for 1930:

President.....W. F. Massey, Chester  
Vice-President.....B. W. Yawn, Eastman  
Secretary-Treasurer.....A. R. Bush, Hawkinsville  
Delegate.....J. M. Smith, Cochran  
Alternate.....I. J. Parkerson, Eastman

#### BULLOCH-CANDLER-EVANS MEDICAL SOCIETY

Bulloch-Candler-Evans Medical Society announces

the following officers for 1930:

President.....W. D. Kennedy, Metter  
Vice-President.....W. D. Woods, Portal  
Secretary-Treasurer.....W. E. Simmons, Metter  
Delegate.....J. H. Whiteside, Statesboro  
Delegate.....R. L. Kennedy, Metter  
Alternate.....A. J. Mooney, Statesboro  
Alternate.....W. E. Simmons, Metter  
Censors—R. L. Cone, E. C. Watkins, and H. H. Olliff.

#### MONROE COUNTY MEDICAL SOCIETY

Monroe County Medical Society announces the following officers for 1930:

President.....G. H. Alexander, Forsyth  
Vice-President.....R. C. Goolsby, Forsyth  
Secretary-Treasurer.....J. O. Elrod, Forsyth  
Delegate.....W. J. Smith, Juliette  
Alternate.....B. L. Smith, Forsyth  
Censors—R. C. Goolsby, B. L. Smith, and G. H. Alexander.

#### SPALDING COUNTY MEDICAL SOCIETY

Spalding County Medical Society announces the following officers for 1930:

President.....W. H. Austin, Griffin  
Vice-President.....A. H. Huckaby, Griffin  
Secretary-Treasurer.....H. J. Copeland, Griffin  
Delegate.....A. H. Frye, Griffin  
Alternate.....K. S. Hunt, Griffin  
Censors—H. W. Copeland, W. H. Steele, and M. S. Crowder.

#### EMANUEL COUNTY MEDICAL SOCIETY

Emanuel County Medical Society announces the following officers for 1930:

President.....A. C. Johnson, Garfield  
Vice-President.....R. L. Sample, Summit  
Secretary-Treasurer.....R. C. Franklin, Swainsboro  
Censors—G. L. Smith, A. C. Johnson, and J. M. Nunez.

#### TURNER COUNTY MEDICAL SOCIETY

Turner County Medical Society announces the following officers for 1930:

President.....H. M. Belflower, Sycamore  
Vice-President.....W. J. Turner, Ashburn  
Secretary-Treasurer.....J. H. Baxter, Ashburn

#### TAYLOR COUNTY MEDICAL SOCIETY

Taylor County Medical Society announces the following officers for 1930:

President.....W. W. Edwards, Butler  
Vice-President.....S. H. Bryan, Reynolds  
Secretary-Treasurer.....R. C. Montgomery, Butler  
Delegate.....R. C. Montgomery, Butler

#### GORDON COUNTY MEDICAL SOCIETY

Gordon County Medical Society announces the following officers for 1930:

President.....B. W. Fite, Resaca  
Vice-President.....W. R. Barnett, Calhoun  
Secretary-Treasurer.....W. R. Richards, Calhoun

#### ELBERT COUNTY MEDICAL SOCIETY

Elbert County Medical Society announces the following officers for 1930:

President.....A. C. Smith, Elberton  
Vice-President.....G. A. Ward, Elberton  
Secretary-Treasurer.....B. B. Mattox, Elberton  
Delegate.....D. N. Thompson, Elberton  
Alternate.....W. W. Hardman, Elberton  
Censors—O. B. Walker, J. E. Johnson, and D. N. Thompson.

#### WARREN COUNTY MEDICAL SOCIETY

Warren County Medical Society announces the following officers for 1930:

President.....H. T. Kennedy, Warrenton  
Vice-President.....F. L. Ware, Warrenton  
Secretary-Treasurer.....H. B. Cason, Jr., Warrenton  
Delegate.....A. W. Davis, Warrenton

### COMMUNICATIONS

#### HEALTH EDUCATION

*To the Editor:*

Enclosed is a folder describing the effort that will be made during April to arouse the public to the significance of childhood tuberculosis.

In connection with the campaign, which is to be strictly educational, we have produced a manual, "The Childhood Type of Tuberculosis," which we believe to be the clearest and most concrete treatise thus far compiled on the difficult subject of childhood tuberculosis. A copy is enclosed.

Dr. Chadwick, who planned and inaugurated the ten-year project of searching out all school children in Massachusetts who have childhood type of tuberculosis is author of the section on the diagnosis, treatment, and significance of childhood tuberculosis, and Dr. McPhedran, of Phipps Institute, contributed the section on x-rays. It consists of

The diagnosis and treatment of childhood tuberculosis

Classification of the lesions

Aquatone reproductions of x-ray plates with interpretations

Detailed instructions for making the tuberculin test  
Color plates of tuberculin reactions

May we respectfully request that you give editorial comment, or other notice, of it, through the columns of the March or April issues of your Journal, at which time the manual will be available through most of our affiliated state and local tuberculosis associations.

H. E. KLEINSCHMIDT, M. D.,

Director Health Education, National Tuberculosis Association.

New York City, Feb. 24, 1930.

#### ACCEPTED PRODUCTS

*To the Editor:*

In addition to the articles enumerated in our letter of January 24, the following have been accepted:

(Continued on Page 126)



## BOOK REVIEWS AND ABSTRACTS

## BOOK REVIEWS

*Tularemia—History, Pathology, and Treatment*, Walter M. Simpson, M. S., M. D., Dayton, Ohio. With fifty-three text illustrations and two colored plates; 161 pages. Paul B. Hoeber, New York.

Tularemia is essentially an American disease. It exists primarily as a disease of wild rodents, especially rabbits, and occurs as a fatal bacteremia due to *Bacterium Tularensis*. Prior to 1924 only fifteen cases had been recognized, while during the four-year period from 1924 to 1928 more than 800 cases were recognized. Georgia ranks eighth with thirty-one cases reported during this four-year interval. To Edward Francis, of the United States Public Health Service, goes the credit for discovering the disease. Cases of the disease were reported from Japan in 1925 and Russia in 1928.

Tularemia has a wide zoological distribution and has been proved to infect wild rabbits, hares, wild rats, wild mice, sheep, muskrats, opossum, cats, woodchucks, coyote, blue grouse, ruffed grouse, Hungarian partridge and quail, deer flies and ticks.

Tularemia is characterized by its high degree of infectiousness, the regional involvement of lymph nodes, the permanence of serum agglutinins in the blood, permanent immunity resulting from one attack, its seasonal incidence, its short incubation period, and rapid onset. There are four clinical types of the disease—ulceroglandular, oculoglandular, glandular, and typhoid types. The ability of *Bacterium Tularensis* to penetrate unbroken skin is a unique characteristic of the disease and explains the high incidence of the disease among laboratory workers. The disease lasts about twenty-one days and proves fatal in about 3 per cent of cases. The primary lesion is of a granulomatous nature. In the regional lymph nodes, spleen and liver can be found foci of caseous necrosis typical of the disease. *Bacterium Tularensis* has been recovered from the blood from the third to the twelfth days of the disease, but has not been recovered after the twelfth day. The agglutinins are entirely absent from the blood during the first week. It is, therefore, useless to collect blood specimens for agglutination tests during this time. Frequent cross agglutination of the organisms of undulant fever by tularemia sera has been reported. As yet no specific treatment has been discovered.

There are several unique features about this book. First, it deals with only one disease; second, it tells all that is known about this disease, and third, it holds the attention of the reader like a work of fiction. It is well edited and the illustrations are excellent. A complete bibliography is given. Every general practitioner in Georgia should have this book.

MARK S. DOUGHERTY, M. D.

*Diseases of the Blood*. By Paul W. Clough, M. D., Associate in Clinical Medicine, Johns Hopkins Uni-

versity; 310 pages. Price \$2.50. Harper & Brothers, Publishers, New York and London, 1929.

A great French playwright on one occasion lifted an entire scene from a play by a contemporary into a piece of his own. When reproached for his plagiarism he is said to have replied that it was better than anything he could do, so what of it? Following his eminent example, this reviewer will quote freely from the jacket of this book:

"One of the most difficult chapters in medicine is that which has to do with what are called the diseases of the blood. The nomenclature is confusing, the etiology generally obscure, and the treatment all too frequently hopeless. The literature of the subject is peculiarly inaccessible." On one occasion this reviewer embarked on a piece of research work relating to the blood dyscrasias. A brief review of the American literature got him horribly confused as to nomenclature. An excursion into the French and German literature rendered the situation hopeless to him, and the work was speedily abandoned.

Dr. Clough has admirably summarized the present knowledge of the subject. "Following a brief, but ample discussion of the various types of blood cells and their origins he discusses the anemias, the leukemias (It is interesting to note that the jacket writes 'leukemia', but the author invariably 'leucemia'), and their related conditions. This is followed by an excellent chapter on blood transfusion and a good section on laboratory technic.

"It has been the custom in the past for physicians to divide blood diseases into two groups, anemias that should be treated with iron and conditions that are obscure and require the services of a consultant." With the aid of this book, the practitioner should be able at least to diagnose most blood dyscrasias, and to treat most of them.

This book is clearly and carefully written. The typography is excellent, the illustrations, though few in number, are original and adequate, and there is a full index. In other words, the minor shortcomings of the first volume in this series have been rectified and the reviewer is able to recommend this book to his colleagues enthusiastically.

L. M. B.

*"Cerebrospinal Fluid in Health and in Disease."* By Abraham Levinson, Associate in Pediatrics, Northwestern University. Third edition; 383 pages, with eighty-eight illustrations. Price \$8.00. St. Louis. C. V. Mosby Company, 1929.

In this edition, knowledge concerning the cerebrospinal fluid has been brought up to date. The history of the subject, and present views concerning the origin, function, and absorption of the fluid are discussed. Four chapters are devoted to the normal spinal fluid, such as the normal pressure, physical and chemical properties, biochemical and cytological characteristics. Several chapters follow, in which pathological changes

in the fluid are considered. The methods of obtaining the fluid and the method of examination are given in detail. Considerable space is given to the spinal fluid changes in various diseases, particularly in children, in which the author has made many personal observations. Finally, a chapter is devoted to intrathecal treatment, as in meningitis, etc. One of the most valuable features of the book is the extensive bibliography which follows each chapter. The book should serve as a useful guide in the examination of the spinal fluid, and in the interpretation of the changes found.

WM. A. S.

*What You Should Know About Heart Disease.*

By Harold E. B. Pardee, Assistant Professor of Clinical Medicine, Cornell University Medical School, etc. Lea & Febiger, Philadelphia, 1928; 120 pages. Price \$1.50.

Some years ago Dr. Trudeau wrote the story of his life. This autobiography has brought hope and cheer to thousands of tuberculous patients. Other books dealing with pulmonary tuberculosis from the viewpoint of the lay patient have appeared in numbers, and their importance in the treatment of the disease is well established. More recently diabetic patients have been helped in the same way. It is strange that the value of such literature for people more or less disabled through heart disease was not appreciated sooner.

This book is ideally calculated to meet the need of the cardiac patient. Scientifically it is adequate. There may be an occasional detail over which one can disagree with its distinguished author—but the practice of medicine would be much less fun if there were no difference of opinion in it. It must be emphasized that there is nothing in this little book to alarm the patient unnecessarily, nor to give him an idea that he knows as much cardiology as his doctor. Without qualification it can be recommended for the practitioner to place in the hands of each of his cardiac patients. By studying it himself, although he may learn nothing new, he will be better able to explain simply and clearly to his patient "what you should know about heart disease."

L. M. B.

*Arthritis and Rheumatoid Conditions—Their Nature and Treatment.* By Ralph Pemberton, M. S., M. D., Physician to the Presbyterian Hospital, Philadelphia; Associate Professor of Medicine in the Graduate Medical School of the University of Pennsylvania; Member of the Council on Physical Therapy of the American Medical Association; Chairman of the American Committee for the Control of Rheumatism. First edition. Contains 337 pages, with forty-two engravings and one color plate. Lea & Febiger, publishers, South Washington Square, Philadelphia, 1929. Cloth, \$5.00.

Few men can say that they have studied one subject faithfully for fifteen years from a clinical and pathological standpoint, yet that is what Doctor Pemberton has done with the aid of his competent associates. This book is the great result of those years of

toil and contains many valuable physiological facts bearing upon the pathology of arthritis.

As the writer says, "Arthritis has been relegated for generations to the limbo of unprofitable, and hence uninteresting, subjects, and from this premise has sprung up an indifference which the practitioner has rarely been able to escape." In the past five years, however, an increased interest has been aroused in arthritis and also in a wider physiological concept of the disease. An indication of this increased interest is the widespread movement in Europe toward intensive study and treatment of the disease as well as the organization of an American committee for the control of arthritis.

In Chapter I interesting statistics are given which prove that arthritis is one of the world's greatest economic problems. In Sweden it causes twice as much "permanent pensionable invalidity" as tuberculosis. In the United States Army at the time of the armistice there were 60,000 cases of chronic arthritis. Only one-tenth as many cases of diabetes mellitus were encountered. The second chapter deals with the etiology of the arthritic syndrome, and a very sane view of the role of focal infection in its production is set forth. It is to be regretted that so many innocent teeth and tonsils have been sacrificed upon the altar of arthritis. As in many other diseases, anything which interferes with the general equilibrium of health may pave the way for an attack of arthritis. In the army during the World War the chief precipitating factors in the order of their importance were exposure to cold or wet, or both, dysentery and injury. Next came influenza, poison gas, hiking, tonsillitis, pneumonia, and gonorrhea. It has been established beyond doubt that the leading organisms responsible for the rheumatic syndrome are streptococcus viridans, streptococcus non-hemolyticus, and the streptococcus hemolyticus.

The pathology of arthritis is discussed in Chapter III and many beautiful plates illustrate the text. The work of Nichols and Richardson is especially commended as they were instrumental in reducing the terminology of the two main types of chronic arthritis to the pathologically descriptive terms, atrophic and hypertrophic. Under dynamic pathology the author discusses the blood chemistry, basal metabolism, the red cell count, lactic acid, and the physiology of the synovial fluid in relation to arthritis. Chapter IV deals with the symptomatology of arthritis. Chapter V gives the modern treatment with emphasis upon physiotherapy, colonic irrigation, removal of proved focal infections, vaccine therapy, massage and diet. A special chapter is devoted to arthritis in childhood, with acute rheumatic fever and gonorrheal arthritis well discussed. The last chapter is called the results of treatment of arthritis and contains the information that 77 per cent of the 400 army cases completely recovered, while only 24 per cent of the civilian cases completely recovered.

This work is the most complete and valuable contribution to the study of arthritis that I have yet

seen. The book is well bound and beautifully printed by Lea & Febiger.

E. A. B.

#### BOOKS RECEIVED

*Surgical Diagnosis.* By forty-two American authors. Edited by Evarts A. Graham, M. D., Professor of Surgery, Washington University Medical School. Three octavo volumes, totaling 2,750 pages, containing 1,250 illustrations, and separate index volume. Philadelphia and London: W. B. Saunders Company, 1930. Cloth, \$35 a set. Volumes I and II are now ready. Volume III and separate index volume ready March 15, 1930. W. B. Saunders Company, Philadelphia.

*Psychology, Normal and Abnormal, With Special Reference to the Needs of Medical Students and Practitioners.* By James Winfred Bridges, Ph.D., Professor of Psychology in the Faculty of Medicine, McGill University. "The reader who wishes a concise and lucid introduction to the entire field of modern psychology could have no better guide than this volume by Professor Bridges of McGill University." Contains 552 pages. Publishers: D. Appleton & Co., 35 West Thirty-second Street, New York City. Price \$3.50.

*Insomnia—How to Combat It.* By Joseph Collins, M. D., author of such books as "The Doctor Looks at Literature", "The Doctor Looks at Love and Life." "Insomnia is at once an affliction from which many suffer and for which the best treatment is self treatment. The author, famous both as a consulting neurologist in New York and as a popular writer, has written here a book for which many will be grateful. He writes interestingly. His suggestions are definite and sane, and if followed carefully they should be of the greatest help to the sufferer. Contains 130 pages. Publishers: D. Appleton & Co., 35 West Thirty-second Street, New York City. Price \$1.50.

#### NEWS ITEMS

The Bulloch-Candler Medical Society met at Claxton on January 8th. Officers were elected and installed for the year. The Evans County Medical Society was merged with the Bulloch-Candler Medical Society. The societies will be known in the future as the "Bulloch-Candler-Evans Medical Society."

The Ocmulgee Medical Society met at Hawkinsville on February 7th. Officers were elected for the ensuing year.

Dr. R. V. Harris, Savannah, delivered an address before the Rotary Club at the Capitol City Club, Savannah, on February 11th. He discussed the work of the Georgia Association of Workers for the Blind.

Dr. Homer L. Barker has removed to Carrollton. He has been in Illinois, Ohio, and Wisconsin for a number of years doing clinical work.

Dr. Herman W. Hesse, Savannah, read a paper entitled, "Blood Sedimentation in Reference to Gynecology", before the Georgia Medical Society on February 11th.

Dr. J. T. Colvin and Thomas G. Ritch, Jesup, were hosts to the members of the Wayne County Medical Society at a shad dinner on the banks of the Altamaha River on February 7th.

The New York Polyclinic Medical School and Hospital, New York City, announce the addition of the following physicians to its faculty: Dr. Shirley W. Wynne (Health Commissioner of New York City), Professor of Preventive Medicine; Dr. Gaylor W. Graves and Dr. Alexander T. Maryin, Professor of Pediatrics.

The Jefferson County Medical Society met at the Jefferson Hotel, Louisville, on Friday evening, February 7th. Dinner was served in the hotel dining room. The table was decorated in Valentine colors of red and white. The Woman's Auxiliary will show health films at the Shadowland Theater, Louisville, on April 4th, the date of the Tenth District Medical Society meeting in Louisville.

The Woman's Auxiliary to the Baldwin County Medical Society, Milledgeville, gave one of the most brilliant social affairs of the season on February 22nd. The party was given to raise funds which will be used to purchase milk for the undernourished children of the city schools. All attending were asked to wear costumes. Prizes were given for the most beautiful costume and for the most comical make-up. Dr. and Mrs. John W. Mobley led the grand march passing in review before the judges, who selected the prize winners.

Dr. Henry M. McGehee, Atlanta, has been elected school physician by the board of trustees of the Georgia School of Technology.

Dr. A. M. Rountree, formerly of Thomaston, has moved to Reidsville.

The members of the Taylor County Medical Society were entertained at a bird dinner by Mr. and Mrs. H. P. Wallace, Butler.

The Annual Congress of Medical Education, Medical Licensure and Hospitals held its meeting at Chicago, February 17, 18, 19.

Dr. A. J. Kilpatrick announces the removal of his office to 407 Seventh Street, Augusta.

Dr. L. H. Kelley announces the removal of his office to the Medical Arts Building, Atlanta.

Dr. R. L. Rogers, Gainesville, entertained the members of the Hall County Medical Society to a bird supper at the Princeton Hotel on February 5th.

Dr. A. W. Stirling announces his resignation from the partnership with Dr. J. C. McDougall. He will see eye patients only at his residence, 2594 Alston Drive, S. E., Atlanta.



The Randolph County Medical Society held its regular monthly meeting at Cuthbert on March 6th.

The Atlanta Neurological Society held its monthly meeting at the Academy of Medicine, Atlanta, February 28th. Dr. Chas. E. Dowman read a paper on "Localizing Diagnosis in Brain Tumor—Phenomena Which May Be Misleading."

Dr. Stuart H. Shippey announces the removal of his office to 815 Grant Building, Atlanta.

The Sumter County Medical Society met at the Windsor Hotel, Americus, on March 6th. Dr. E. B. Anderson, Americus; Dr. J. F. Lunsford, Preston, and Dr. W. S. Prather, Americus, gave case reports; I. W. Irvin, Albany, read a paper entitled "Symptoms, Diagnosis, and Removal of Foreign Bodies From the Trachea and Bronchi."

A conference on the prevention of malaria was held at Camilla on March 19th. Sponsored by Dr. C. O. Rainey, Commissioner of Health of Mitchell County, in co-operation with the State Board of Health.

Dr. J. R. McCord, Professor of Obstetrics of Emory University School of Medicine, will give a short intensive post-graduate course in obstetrics at Cuthbert during the week of March 24th.

Dr. J. C. Hind, formerly of Reynolds and secretary-treasurer of the Taylor County Medical Society for a number of years, has entered the service of the government and is now stationed at the United States Veterans' Bureau, Washington, D. C.

The First District Medical Society met at Metter on February 20th. Titles of papers on the scientific program were as follows: "A New Conception of Bright's Disease," by Dr. John W. Daniel, Savannah; "The Condition Surrounding the Blind People of Georgia and Its Relief," by Dr. R. V. Harris, Savannah; "Spinal Anesthesia in Practice," by Dr. C. Thompson, Millen; "Pancreatitis—Review of Literature and Report of Cases," by Dr. Chas. Usher, Savannah; "Case Reports," by Dr. H. W. Doster, Rocky Ford; Address, by Dr. William R. Dancy, president of the association.

Dr. J. R. Garner, Atlanta, chief surgeon for the Atlanta and West Point Railroad et al., delivered an address before the Chicago Tuberculosis Institute in Chicago on March 5th. WGN, the radio station of the Chicago Tribune, broadcast the address. Dr. Garner for six years has been chairman of the Committee on Occupational Diseases and Hazards from the Surgical Section of the American Railway Association.

The Surgical Association of the Atlanta and West Point Railroad, the Western Railway of Alabama, and the Georgia Railroad held its annual meeting at the Ansley Hotel, Atlanta, on March 13th. Dr. J. R. Garner was host to the members and guests at a luncheon.

The X-ray and Clinical Laboratories of Drs. A. J. Ayers and William F. Lake, offices at 111 Medical Arts Building, Atlanta, have been approved by the Council on Medical Education and Hospitals of the American Medical Association. Advertisement of their laboratories will be found in the advertising section of this Journal.

The American Public Health Association will hold its fifty-ninth annual session at Fort Worth, Texas, October 27-30, 1930.

The Atlanta Tuberculosis Association held its annual meeting on February 20th. Reports of the officers showed that \$55,000 worth of free medical service had been rendered to the poor people of Atlanta during the past year; 11,170 visits made to homes; 2,624 cases treated; 1,127 clinics served by nurses; laboratory service given to 3,547, and fifty cases of tuberculosis definitely arrested. The educational service was increased 100 per cent and the cost of administration reduced. Officers elected for the ensuing year were: P. E. Glenn, president; R. K. Rambo, Lewis D. Sharp, and Miss Myra Graves, vice-presidents; Lewis D. Sharp, treasurer; Miss Mary Dickinson, executive secretary, and Dr. A. M. Dimmock, chairman of the medical staff.

The State Board of Health in co-operation with the Child's Bureau Department of Labor, Washington, D. C., are preparing a week of post-graduate work for the negro physicians of our state. This will be short and intensive, a course in practical things for the negro physicians who attend. It will be held at 50 Armstrong Street, in connection with the Gray Clinic, beginning on June 16th. Many of the leading physicians of Fulton County and Emory University will participate. Dr. J. R. McCord, Professor of Obstetrics, Emory University, is now preparing a schedule for this clinic week, above mentioned. The Negro State Medical Association is very much interested in this opportunity, and it is quite likely that they will hold their annual meeting during this week in the city of Atlanta.

The Atlanta Neurological Society held its regular meeting at the Academy of Medicine on February 28th. Dr. Charles E. Dowman read a paper on "Localizing Diagnosis in Brain Tumor—Phenomena Which May Be Misleading."

Emory University School of Medicine, medical unit of Grady Hospital, Atlanta, held its regular meeting on the 11th. The program consisted of a symposium on tuberculosis. Papers read were entitled as follows: "Tuberculosis as a State Problem," by Dr. E. W. Glidden, Alto; "Tuberculosis as a City Problem," by Dr. J. H. Bradfield, Atlanta; "Tuberculosis of the Eye," by Dr. W. O. Martin, Jr., Atlanta; "Tuberculosis of Bones and Joints," by Dr. F. G. Hodgson, Atlanta; "Tuberculous Laryngitis," by Dr. J. C. McDougall, Atlanta; "Tuberculous Peritonitis," by Dr. W. E. Person, Atlanta; "Diagnosis of Pulmonary

Tuberculosis," by Dr. C. W. Strickler, Atlanta; "Treatment of Pulmonary Tuberculosis," by Dr. Champneys H. Holmes, Atlanta.

Dr. and Mrs. B. C. Teasley, Hartwell, entertained the members of Hart County Medical Society and a number of guests from other cities at their home on February 22nd. A four-course dinner was served. Dr. Howard Hailey, Atlanta, read a paper on skin diseases; Dr. Harry Teasley read a paper on diabetes.

The Ninth District Medical Society met at Commerce on March 19th.

### OBITUARY

Dr. Clarence Oscar Tye, Edison; member, Emory University School of Medicine, 1897; aged 56; died at his home on February 7, 1930. He was born in Quitman County and began the practice of medicine in Mitchell County. Dr. Tye had resided at Edison and practiced in Calhoun and adjoining counties for twenty-eight years. He was a member of the Tri-Counties Medical Society and the American Medical Association. Dr. Tye served as steward in the Methodist Church and superintendent of the Sunday School for many years. Surviving him are his widow; two sons, Dr. J. P. Tye, Albany, and Oscar Tye, Edison; five daughters, Mrs. W. J. McKimmie, Jr., Coleman; Miss Clifford Tye, Waverly Hall; Miss Hortense Tye, Wesleyan College, Macon; Misses Mae and Virginia Tye, Edison. Funeral services were conducted by Rev. L. E. Brady from the Methodist Church. Interment was in the family burial grounds at Dickey.

Dr. William J. Adair, Rockmart; Emory University School of Medicine, Emory University, 1879; aged 74; died at his home on February 4, 1930. Surviving him are his widow; one son, William Adair, United States Navy; three daughters, Mrs. R. W. Hubbard, Eldon, Oklahoma; Mrs. R. L. Bidez, Mobile, Ala.; Mrs. Hazen Pannell, Copperhill, Tenn.

Dr. Nathaniel Hawthorne Lang, Waverly; University of Georgia Medical Department, Augusta, 1917; aged 35; died suddenly at his home on February 7, 1930. He formerly resided at Omega and Ty Ty. Surviving him are his widow and four sons. Interment was in Homeward Cemetery in Camden County.

### COMMUNICATIONS

(Continued from Page 121)

United States Standard Products Company—

Diphtheria Toxin-Antitoxin Mixture 0.1 L.  
(Non-Sensitizing); prepared from sheep serum.

The following articles have been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1929, p. 481):

Robert McNeil—

Tincture Digitalis Duo-Test McNeil

Black Capsules Digitalis Duo-Test McNeil

COUNCIL ON PHARMACY AND CHEMISTRY,

AMERICAN MEDICAL ASSOCIATION.

Chicago, Ill., Feb. 21, 1930.

### COMMUNICATIONS

To the Editor:

The American Association for the Study of Goiter will meet in Seattle, July 10, 11, and 12, on Thursday, Friday, and Saturday.

We are very anxious to place upon our program men from all parts of the country, but as yet have no one from your state. Could you be so kind as to send me the names of the men in Georgia who are particularly interested in this subject so that I may extend to them an invitation to appear on the program? It is planned to hold the meetings two days in Seattle, and the third day, Saturday, go to Mount Rainier, which we believe will be attractive to the men who do not live in this immediate vicinity.

J. TATE MASON, M.D.,

Vice-President,

American Association for the Study of Goiter.

February 10, 1930.

1115 Terry Avenue, Seattle, Washington.

### MEAD'S SERVICES FREE TO PHYSICIANS

The various Mead Services have become almost as valuable to physicians as the Mead products—Dextri-Maltose, Cod Liver Oil, Mead's Viosterol, etc.

The list is too long to be enumerated here and includes the following: Prescription Pads, Height-and-Weight Charts, Feeding Calculators, Appointment Cards, Instructions to Expectant Mothers, etc.

For further information, without obligation, write to Professional Service Department, Mead Johnson & Co., Evansville, Ind.

### THE TREATMENT OF MALARIA

(Continued from Page 105)

always advised a diuretic such as sweet spirits of nitre after giving quinine in solution. They got rapid results. I believe active sweating helps to get rid of toxin. It is a good idea to accompany doses of quinine with small doses of hydrochloric acid. It helps the kidney. I believe that the reason we do not get good results is that quinine does not get into the circulation. I think the quinine bisulphide is better than quinine sulphate. There has to be acid in the stomach to put quinine sulphate in solution.

Dr. J. T. King: Quinine sulphate cannot be changed into bisulphide in the stomach.

### THE PHYSICIAN'S POLICY IS MEAD'S POLICY

Messrs. Mead Johnson & Company, in addition to producing dependable Infant Diet Materials such as Dextri-Maltose, have for years been rendering physicians distinguished service by rigidly adhering to their well-known policy which is the following:

"Mead's Infant Diet Materials are advertised only to physicians. No feeding directions accompany trade packages. Information in regard to feeding is supplied to the mother by written instructions from her doctor who changes the feedings from time to time to meet

the nutritional requirements of the growing infant. Literature is furnished only to physicians."

Every physician would do well to bear in mind that in this commercial age, here is one firm that instead of exploiting the medical profession, lends its powerful influence to promote the best interests of the medical profession it so ably serves.

#### NOTICE OF EXAMINATION FOR ENTRANCE INTO REGULAR CORPS OF U. S. PUBLIC HEALTH SERVICE

Examination of candidates for commission as Assistant Surgeon in the Regular Corps of the United States Public Health Service will be held at the following named places on the dates specified:

Washington, D. C. .... May 5, 1930  
Chicago, Ill. .... May 5, 1930  
New Orleans, La. .... May 5, 1930  
San Francisco, Cal. .... May 5, 1930  
Stapleton, S. I., N. Y. .... May 5, 1930

Candidates must be 23 years and not over 32 years of age. They must have been graduated in medicine at a reputable medical college and have had one year's hospital experience or two years' professional practice. They must satisfactorily pass oral, written, and clinical tests before a board of medical officers and undergo a thorough physical examination.

Successful candidates will be recommended for appointment by the President, with the advice and consent of the Senate.

Request for information or permission to take this

examination should be addressed to the Surgeon General, United States Public Health Service, Washington, D. C.

#### MEDICAL ASSOCIATION OF GEORGIA PARTRIDGE INN HEADQUARTERS Eighty-first Annual Session AUGUSTA

The first meeting of the House of Delegates will be held in the convention hall of Partridge Inn, Tuesday, May 13th, at 3:00 P. M.

The first meeting of the Council will be held at 6:00 P. M., of the same day. Other meetings of the Council will be held on the call of the chairman.

The scientific assembly will convene at 10:00 A. M., Wednesday, May 14th, and will continue its meetings through Friday morning, May 16th.

The members of the Richmond County

**WANTED:** Position as office nurse, by graduate of accredited training school. Experienced stenographer and typist. Address L. G., in care of this Journal.

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**JUNE 23-27, 1930**

VIA

## **Louisville & Nashville Railroad**

These Special Sleepers will leave Atlanta June 21st and 22nd on following trains:

**Lv. Atlanta (New Union Station)**  
**Ar. Detroit**

**The Flamingo**  
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**4:23 P.M.**

**The Southland**  
**7:50 A.M.**  
**8:35 A.M.**

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Medical Society extend a cordial invitation to all members of the Association.

### EXHIBITS

Arrangements for commercial and scientific exhibits are more satisfactory than ever before with space in the front of the Partridge Inn at the main entrance on street floor. All meetings of the House of Delegates, Council and scientific session will be held on the mezzanine floor. Every exhibitor will have an excellent opportunity to show his display to every doctor attending the meetings. Nothing is being overlooked for the comfort and convenience of all.

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Approved by the Council on Medical Education and Hospitals of the American Medical Association.

### DRUG ADDICTS

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See Description, Journal A.M.A.  
Volume XLVII, Page 1488.

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# THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

DEVOTED TO THE WELFARE OF THE MEDICAL PROFESSION OF GEORGIA  
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Volume XIX

April, 1930

No. 4

## THE COMPLICATIONS OF GASTRIC ULCER\*

RALPH H. CHANEY, M. D.

*Augusta*

The principle complications that arise in gastric ulcer are contractions from healing, perforation, hemorrhage, and malignant change.

The first of these complications, cicatrization or contraction, arises at any point in the stomach and is dependent for its deforming characteristics on the situation, size, and depth of the ulcer which has cicatrized. The most important of the deformities that follow the development of scar tissue are the stenoses of the pylorus which result in atrophy and secondary dilatation of the stomach. Approximation of the curvatures may occur from the healing of ulcers on the lesser curvature.

Hour-glass stomach usually arises by the cicatrization of saddle ulcers or in instances where many ulcers extend entirely around the organ. They may occur in any position in the stomach and the loculae formed are not of necessity of equal size even the tendency to depict them as being approximately equal is the rule. These complications may be attended by more varied symptoms than the original ulcer. Four of the symptoms of hour-glass formation are rather characteristic and doubt never exists as to the diagnosis when they are present. For instance—(1), on washing out the stomach, fluid introduced seems to disappear and fails to return through the tube, the explanation being that it passes into a second cavity; (2) when the stomach is washed out until the fluid returns clear and lavage is again performed after a few

minutes, the return of dirty fluid, due to the reflux from the second unwashed cavity, is characteristic; (3) the existence of a splashing sound in the second cavity after the first cavity has been emptied by lavage; (4) when the cavities contain fluid and air, alternate compression will cause the contents to pass from one into the other.

The second of these complications, namely, perforation results from the erosion of the ulcer through to the peritoneal cavity. When perforation takes place suddenly, directly into the peritoneal cavity, the condition is said to be acute. When it occurs suddenly with the stomach empty and only a small amount of fluid escapes through a small opening and the peritoneum is not flooded with stomach content and the opening is promptly occluded completely or in part by pressure of a lymph gland or the omentum, the perforation is said to be subacute. Chronic perforation is where the perforation occurs in a region that is protected by a previously developed barrier of adhesions so that the inflammatory reaction is limited, and localized perigastric abscess is the consequence.

It is probable that a better classification is based on the consequence of perforation rather than on the rapidity of perforation and we can say that four conditions arise: first, the omentum or some solid organ, such as the pancreas, liver, spleen, or a lymph gland may close the opening in the stomach; second, an inter-peritoneal sac enclosed by adhesions may communicate through the ulcer with the cavity of the stomach; third, a fistulous communication may form between the stomach or some other hollow viscus, or between the stomach and the exterior; fourth, the ulcer may perforate into the general peritoneal cavity. These conditions may be variously combined with each other, but in the first three conditions protective adhesions are

\*Lecture delivered before the third and fourth year classes at the Medical Department of the University of Georgia, Augusta, Ga., January, 1930.

present, and in the fourth these adhesions are either absent or have been separated. Welch notes that the pancreas, unlike the liver and spleen, which frequently are subject to massive erosion, possess a comparative immunity against digestive invasion, but Dragstedt and Vaughan have shown experimentally that when the spleen is sutured to defects in the stomach wall it resists digestion, which would indicate the spleen was also resistant.

The situation and the extent of the local peritoneal abscess, arising from gastric perforation, depends upon the other structures to which the stomach has become adherent and the commonly accepted view is that an ulcer perforating before the formation of adhesions will produce a general peritonitis involving the greater or lesser peritoneal cavities dependent on the situation of the ulcer. As will later be shown, there is some question now being raised as to whether perigastric adhesions form primary or subsequent to perforation.

Cutaneous fistula leading from the stomach are rare following gastric perforation, but communications between the stomach and other hollow viscera is not uncommon, the colon, duodenum, gallbladder, common bile duct, pancreatic duct, pleura, pericardium and even the left ventricle have been the site of these communications. The most common fistulas are those connecting the third with the first portion of the duodenum.

Acute perforations resulting in general peritonitis usually are on the anterior wall, but in contrast to the usually accepted rule recent studies have shown that perforations are more frequent in other situations near the lesser curvature or pylorus than on the anterior wall. The reason for these perforations being overlooked is due to the fact that the stomach in these portions generally becomes attached to some other structure that prevents diffusion of the gastric content. On the anterior wall the ulcers frequently are small and have a punched-out hole which suggests they have recently formed, though occasionally the edges are thick and indurated, suggesting long duration. The last type of ulcer more commonly occurs in other areas of the

stomach where the ulcer is reinforced by adjacent adhesions.

The frequency of acute perforation varies according to the experience of the individual author. Fenwick gives 28.5 per cent; Brenton, 13 per cent, of which 85 per cent perforate the anterior wall, and Welch gives 3.6 per cent as the frequency of occurrence.

No definite age or sex incidence occurs in perforating gastric ulcer, Biset reporting a perforation in an infant forty-five hours old, and Fenwick reports eighteen recognized cases of perforation in childhood. Nevertheless it is more common in the third decade.

As has been before noted, although the large percentage of ulcers occur on the posterior wall in the proportion of 190 to 10, four of the posterior wall ulcers will perforate and eight and one-half of the ten anterior wall ulcers will perforate. Acute ulcers perforate most frequently near the cardia, while practically all chronic ulcers perforate at or near the pylorus.

Howard states that hemorrhage occurs in  $8\frac{1}{2}$  per cent of gastric ulcer cases and causes death in 29.5 per cent of the fatal cases. Mayo-Robson says that hemorrhage to a greater or lesser degree occurs in 50 to 80 per cent and is fatal in from 3 to 11 per cent. The source of the hemorrhage may be arterial, venous, or capillary and, curiously, capillary hemorrhage may be sufficient to be fatal. Profuse and sometimes fatal hemorrhage usually occurs from the larger vessels in the submucous coat, but most of the fatal hemorrhages take place from the large vessels between the muscular and serous coats, particularly where the ulcer involves the main trunks in relationship to the curvatures.

Penetration through the walls of the stomach and through adjacent peri-gastric adhesions may cause fatal hemorrhage from erosion of large vessels near the stomach such as the splenic, hepatic, or pancreaticoduodenal arteries, and instances are recorded where erosion into the portal and splenic veins or mesenteric vessels has taken place. Bleeding also may occur from vessels in the parenchyma of adjacent organs invaded by the ulcer. Finney states that the most common source of fatal hemorrhage is from the splenic ar-



tery, the gross relation of which to the posterior wall explains its frequent involvement by adhesions and fixation before the advancing ulcer process. Ulcers which give rise to fatal hemorrhage are usually chronic in their course and those ulcers situated in the middle anterior wall, although liable to perforate, rarely produce fatal hemorrhage because of the small caliber of the vessels supplying that area.

The fourth complication, malignant change, was first suggested by Cruveilhier in 1839 and has been since that time a question of controversy between pathologists and surgeons. No question exists but that carcinoma may have its origin in ulcer of the stomach, but the proportion of ulcers which ultimately become malignant varies according to the opinion of different authors. It is important because the surgeon who believes that 50 per cent of ulcers undergo carcinomatous change will advocate more radical procedure than the surgeon who believes it occurs in less than 5 per cent. Cabot and Adie in reviewing the trend of opinion found that in eighty-two reports, seventy-four authors believe that less than 10 per cent of gastric ulcer develop carcinoma, while fifteen authors believe the frequency to be over 50 per cent. This difficulty may have arisen from the method of study in the attempt to differentiate from the history, cases of ulcer and carcinoma; and likewise in the attempt to study the life history of conservatively treated ulcer. The final decision is probably by the study of the gross and microscopic pathology. Clinical estimates furnished by many observers show that carcinoma has been preceded by long histories of ulcer. Lockwood in 174 cases of gastric carcinoma found the history suggestive of ulcer in 7 per cent and definite in 3 per cent; and in a series of 346 ulcers of the stomach treated by medical measures and observed by Greenough and Joselin less than 5 per cent developed carcinoma, but on the other hand Joselin later published figures showing that 24 per cent of late deaths following operations for gastric or duodenal ulcer were from cancer of the stomach. Balfour in studying 799 cases operated on for gastric ulcer showed that thirty-three, or 4.1

per cent, died of cancer in the seven years following operation. Ewing cites 1,610 cases in which carcinoma developed in 2.2 per cent, and he believes that the frequency of carcinoma developing after gastro-enterostomy is not greater than carcinoma developing after resection of the ulcer. MacCarty and Wilson have been largely responsible for the theory that as high as 70 per cent of ulcers later undergo malignant change. This is probably due to the fact that all pathologists do not as yet accept the various downgrowths of epithelium near the edge of the ulcer to indicate malignancy and do not accept MacCarty's view that malignancy can be determined by cytological study alone. Dible, while unable in the study of thirty-three cases of malignancy to determine that ulcer preceded in more than two instances, points out that histologically 96 per cent of ulcers show destruction of the muscle at the base, that endarteritis is common adjacent to the ulcer and that vascular thrombosis is usually present. On the other hand, carcinoma may or may not destroy muscle, its usual tendency being to invade rather than to destroy. Endarteritis may be present in carcinoma, but its absence is strong evidence against pre-existent ulcer. Fibrosis, when existing in association with cancer, can be interpreted as evidence of pre-existent ulcer, and then only when it is free from malignant cells.

In January of the present year Singer and Vaughan called attention to the fact that in textbooks and surgical systems perforation of peptic ulcer into the free abdominal cavity is considered fatal unless the opening is closed surgically. The characteristic perforation is associated with violent, intolerable, epigastric pain and not infrequently associated with collapse. These symptoms frequently show a temporary remission commonly called the period of response. The generally stated facts are that only 5 per cent of cases recover without surgical intervention and this small group have a diffuse peritonitis which usually produces many interperitoneal abscesses which eventually require surgical drainage. In addition to this characteristic group, a group of cases exists in which the overwhelming pain

at the onset is immediately followed by progressive collapse and death in a few hours. This fulminating type of perforation is well known. In addition to these two forms the authors previously referred to call attention to a third variety which has been mentioned in German literature as the "gedeckte perforation", in French literature as "perforation fermee et isolee", and in American and English literature as "subacute perforation." This type, though ushered in with the symptoms of a perforative peritonitis, fails to develop evidence of a diffusely progressive peritonitis, but instead produces rather mild symptoms that quickly abate. In order to define this syndrome, Singer and Vaughan have applied the name "formes frustes" to this type of lesion. They believe from the pathological character that peri-gastric adhesions arise secondary to these minor perforations rather than to precede them.

In a large number of cases they have succeeded in demonstrating by use of the fluoroscope free intraperitoneal air which can be made to shift to all parts of the abdomen on change of the patient's position. In the majority of these cases operation was not performed, but the antecedent history of ulcer, the acute onset of symptoms, and the signs of upper abdominal peritonitis and the clinical course rendered it clear that a perforated peptic ulcer was the cause of the altered symptomatology. Even more convincing than the existence of free air is the fact that at operation no peri-gastric sac or adhesions which were older than the perforation could be discovered, even though in some instances encysted gastric content was found in regions remote from the stomach and the perforation was left unsutured because it had already sealed over, the patients going on to recovery.

From this evidence the conclusion is drawn that speedy spontaneous recovery which occurs after some perforations is not due to pre-formed adhesions but to changes which follow rather than precede the rupture, this change being the early spontaneous sealing or plugging of the hole, the peritoneum being able to cope with a relatively small amount

of foreign fluid which is sterile and therefore produces but slight peritoneal disturbance.

It has been universally taught that this type of perforation was relatively rare. The authors referred to above were struck with the fact that many of the patients suffering from this condition entered the hospital in good condition, entering in order to convalesce or on account of persistent pain of mild character. One patient entered because he was curious to learn what the diagnosis would be. Painstaking analysis of the history is the most reliable means of diagnosis.

The incidence is shown by the fact that on the wards of Cook County Hospital during January, February, and March of 1929 that fourteen undoubted cases of "formes frustes" were encountered and that during the same period only twelve cases of classical perforating ulcer were admitted. Thus, it would seem that the mildest types are more frequent than the classical types and they most frequently are admitted to the medical rather than the surgical wards of hospitals.

In respect to symptomatology the majority of these cases show periodic attacks of chronic ulcer distress for more than twelve months and it is the rule that several days prior to the actual perforation that prodromal symptoms consisting of pain, vomiting, and epigastric tenderness exist. The pain is more severe, of different character, and less responsive to alkalis than ordinary ulcer distress. Vomiting is more persistent and frequently fails to relieve the pain. A definite point of tenderness exists in the epigastrium excited by even slight touch. Up to this point the symptoms, with the exception of intensity, are practically the same as other ulcer cases. The pain is violent, but not so excruciating as in the classical type, and the prostration is never overwhelming, though the picture is rather dramatic. The abdomen within a few hours presents boardlike rigidity and upper abdominal tenderness is similar to that seen in the classical instance.

However, within a few hours after the perforation, usually from two to ten, the initial symptoms subside, leaving the patient in a state of comparative comfort. In fact, the patient seen during this quiescent period may



not even suggest the existence of an abdominal catastrophe. The subsequent course is dependent upon the amount and character of the escaped gastric content and in those instances where a small quantity of relatively sterile duodenal fluid has escaped only a mild local peritoneal reaction may be excited which produces but little discomfort and exists only for a short period. Extravasation of considerable quantity produces a diffuse peritonitis with commensurate increase of symptoms. In these instances the pain is rather severe, the vomiting persistent and lasting for several days.

In some instances the pain originally is noted in the upper abdomen, but by the time the patient comes under observation it shifts exclusively to the right lower quadrant. This shift in pain being due to the gravitation of the escaped fluid into the right iliac fossa. It is this type of case in which the mistaken diagnosis of appendicitis is frequently made. When the inflammatory reaction extends to the subphrenic region the pain is usually right upper or lateral abdominal in position, and hiccough commonly is the chief subjective manifestation of subphrenic localization. The patient commonly is subfebrile and even in more severe cases the fever never reaches above 100 degrees Fahrenheit, the leucocytes ranging from 10,000 to 20,000.

The physical examination depends upon the stage in which the patient is seen; if seen early, more or less diffuse signs indicating general involvement exist, and later, depending upon the localization, the tenderness and pain may shift to any region, but more commonly the shift occurs to the region of McBurney's point. The rigidity is marked in the first stage, mild or absent in the second stage. Peristaltic sounds usually are diminished and tympany, due to distention, is commonly mild and does not appear before the second day. In some cases a friction rub over the hepatic region synchronous with respiration exists. This friction rub, associated with hiccough, should attract our attention to the possibility of peptic ulcer. Obliteration of liver dullness rarely occurs in this type because the leakage is only slight.

Immediate x-ray examination shows free

intraperitoneal air and in the later stages the barium meal demonstrates the existence of an ulcer.

The clinical course of this type is relatively calm, and it is difficult in the large per cent of cases to persuade patients to remain in the hospital more than a few days. In the more involved cases, slight fever of less than 100 degrees Fahrenheit may persist for some weeks.

From the standpoint of treatment a patient with a perforation recognized within twenty-four hours should be surgically treated, but when the perforation has existed twenty-four to forty-eight hours and the signs and symptoms point to spontaneous closure and trifling leakage, operation need not be immediately insisted upon, and in a large majority of cases is probably best delayed until the patient completely recovers from its effects.

The recognition of the frequency of this type of perforation will probably throw considerable light on the origin of a number of puzzling intra-abdominal conditions, in particular it will probably explain some of the so-called cryptogenic intra-abdominal abscesses, especially the subphrenic and hepatic ones. It will also probably explain not only local but distant intra-abdominal adhesions, the source of which has always been puzzling. It also may explain some instances of periappendiceal abscess in which upon removing the appendix a sound organ with healthy subserous structures is present. Other conditions which may be mistaken or may have been erroneously diagnosed are acute gastritis, acute cholecystitis, acute pancreatitis, diaphragmatic pleurisy, central pneumonia, coronary thrombosis, mesenteric thrombosis, and intestinal intermittent claudication.

The fundamental thing which Singer and Vaughan have brought out is that a great deal larger per cent of ulcers spontaneously close than has been the common conception. Likewise their studies show that peri-gastric adhesions indicate previous perforation rather than a development prior to perforation and we must therefore be more careful in our gastric diagnoses or we are going to overlook a large number of cases in which later dis-



aster could be prevented by early therapeutic measures.

I have pointed out at length the complications occurring in association with gastric ulcer to impress forcibly upon your consciousness the fact that simple ulcers are rarely dangerous to life unless complications arise and that the keen diagnostician must always be alert for the symptoms which indicate such changes to be arising. The simple ulcer may be medically treated, but when it reaches the stage where complications arise it should be dealt with surgically.

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### NEW CONCEPTION OF BRIGHT'S DISEASE\*

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In presenting this paper I will avoid, as much as possible, technical terms and pitch it on the plane of a round-table talk. Due to the teachings of the pathologist, who delves into the end products of disease, we have been impressed with the autopsy findings in cases of Bright's disease, and there we stopped and were satisfied to look upon this symptom complex as solely a disease of the kidneys with a secondary involvement of the heart and vascular system. Of recent years we have given more attention to physiology and its allied science, biochemistry. These two branches of medicine deal with the living subject and normal functions. In order to understand disease conditions we must understand, as far as possible, cause and effect. The cause of many perversions of normal functions in the body, which condition we designate as disease, is a poison. By a poison I mean a chemical agent which is produced by bacteria, or by parasites, or from the minerals and their compounds, and sometimes from the breaking down of the glands of internal secretions.

In taking up the study of the effects of these agents, let me say here it has been stated that "we do not poison our body

cells; they poison themselves; we do not nourish our body cells; they nourish themselves." In other words, our body is composed of cells that are selective and discriminating in their function. In this respect alone is it possible to determine the difference between the animate and the inanimate, or the living and the dead. The living, or animate thing, has the ability to select from the things which nature places around it, the material suitable for ingestion, which, when properly metabolized, causes the living thing to increase its growth from the inside; while the inanimate thing does not have this ability and only grows from the outside by concretions, or by things being added to it. These principles enable us to grasp this thought: the living body is composed of numerous cells, each and every one an individual organism having the power of discrimination, selecting the food from the blood stream that is suitable for its own upbuilding and growth from the inside, rejecting those things which are deleterious. When the cells of the body are fed from outside chemicals, or poisons, be they bacterial or otherwise, some of the cells reject these poisons, while others combine with them, causing a breaking down of the normal function of the cells, or aggregation of cells which go to make up some special organ in the body.

The foregoing statements can be illustrated by citing the effect which carbon monoxide gas has upon the blood cells. This gas, without apparently affecting the blood cells in any way, prevents the normal function of the gas exchanges taking place in the hemoglobin. It is one of the most deadly of all gases, yet produces no effect upon any other structures in the body. Again, we have the evidence of a profound destruction of liver cells by phosphorus poisoning; arsenic affects mostly the alimentary canal and the nerve structures, strychnine affects the nerves, tetanus toxins are also selected by the nerve structures, and the phenol group seems to be selected for combination by the mucous membranes and kidneys. From these few illustrations we see that certain cell structures have a selective affinity for certain toxic poisons, while other cells in the body reject the

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same poisons and show no deleterious effect. Applying this thought to Bright's disease, we find that the nitrogenous retention in the blood stream, the passing of albumin in urine, etc., is probably not so much the result of a damaged kidney structure with the lack of ability to function normally, but in reality is a breaking down of the various cells of the liver and other organs and tissues of the body, bringing about an inability to carry the proteins, minerals, water, and other products to the end point where they become suitable for the building up of the body cells. To confirm this it has been shown in the laboratory that the kidneys can be removed from an animal and the animal will live longer and not die from uremia than another animal of the same specie which has been injected with a chemical poison, for which the kidney structures seem to have a selective action, producing degeneration with a suppression of urine. If these cases of chemical poisoning are further investigated it will be found that other cells than the kidney cells have also been damaged, thus producing a general breaking down of the normal function in other organs. We find this to be true in bichloride of mercury poisoning, the liver, the alimentary canal, and the blood cells, as well as the kidneys, are involved. With these few points to make plain the line of thought in this paper, we will take up the clinical findings in the living subject.

**Bacterial Invasion:** We know that in almost all acute infections, such as pneumonia, typhoid fever, tonsilitis, sepsis, etc., the urine will show albumin. This is true probably more frequently in tonsilitis and in pregnancy, than in any other condition. In the majority of these cases the albuminuria clears up. Comparatively speaking, few of these cases become chronic. Now the question is: What brings about this temporary albuminuria? Why do some cases progress and terminate in death, while others make a complete recovery? We know that the symptoms which follow the invasion of the body by bacteria are due, not so much to the mere presence of the bacteria, as to their

chemical, endotoxins or exotoxins. Likewise, the symptom of albuminuria is the result of changes in other organs than the kidneys.

To illustrate briefly, I will call your attention to the liver and its influence in metabolism. Anatomically, we know that the liver contains a large portion of the total blood volume, and that it is the first organ the blood reaches after leaving the alimentary tract where the end products of digestion are taken up. The reason for this enormous blood supply to the liver is that the function of the liver is first, a detoxifying one: second, the conversion of end products of digestion into glycogen, ammonia, fatty acids, etc., which in turn are liberated in the blood stream and carried to the various organs and tissues in the body which have a selective action for these products, and utilize them to build up the body and to produce heat and energy, the end, or waste, products being eliminated by the lungs and kidneys principally. As stated above, the liver has, as one of its greatest functions, the ability to destroy toxins, or poisons, which may enter the body from focal infection, through the alimentary canal, or otherwise. It is when the liver begins to break down that foreign proteins enter into the circulation. The entrance of these products, or toxins, into the blood stream in overwhelming doses produces acute conditions, while small amounts, as a daily occurrence for months, and probably years, cause a gradual breaking down of the detoxifying ability of the liver.

The kidneys, which for ages have been looked upon as the seat of Bright's disease, receiving from the blood stream for elimination the toxins, or poisons, of imperfectly metabolized proteins, carbohydrates, etc., undergo an inflammatory process, the exact nature of which we do not at present understand, but we do know that there is a hyperemic condition existing in the beginning and, if it continues, degeneration results. It is fully understood that the kidneys are also selective in their actions and have the ability, to some extent, of retaining in the body the things that are required for the proper functioning of all body cells and the elimination of those that are unnecessary.

Yet, we must associate with this idea of selectivity the knowledge that there is also a threshold point which has to be reached before there are pathological findings in the urine, such as sugar, albumin, etc. Also remember that sodium chloride, glucose, and water are threshold substances, and their retention up to a certain point is absolutely essential for the maintenance of a normal organism. The idea is now being advanced that the albumin appearing in the urine does so because of the fact that it is a foreign protein and should be eliminated. In fact, all proteins are foreign proteins when ingested and they remain so until they reach the liver and are there broken down and converted, under normal conditions, into substances suitable for the further metabolism and upbuilding of the body cells. But when the liver fails and these foreign proteins are allowed to enter the circulation the kidneys, due to their selective action, eliminate them through the urine.

When the liver and kidneys begin to fail in their detoxifying and selective power, the organs and cells of the body suffer because of the fact that the ingested food, which is necessary for upbuilding, is not carried to its proper end products. The cells struggle on and on trying to utilize the material furnished, with the end result of a general breaking down of the entire body structure, culminating sometimes in the clinical symptoms of so-called uremic convulsions, uremic coma, ascites, anasarca, heart failure, and death.

Let us consider the heart and vascular system: We know by clinical experience that so-called Bright's disease cases are anemic. They have more or less loss of blood volume, a lessened red cell count, and low hemoglobin, therefore the blood cannot perform its function of carrying on the gas exchanges between the body cells and the lungs, the result of which is a lessened oxidation. Oxidation is absolutely essential for the maintenance of a healthy state. The lessened blood volume in turn lowers the ability of the blood stream to carry to the tissues the material for their upbuilding and take away for elimination the things that are deleterious. The heart, as well as other organs, is affected

in many ways: the muscles are not properly nourished, the muscular structure is weakened, and sometimes there is a fatty degeneration. These conditions in turn bring about a lessened ability of the kidneys to function because of the fact that the urinary output is dependent upon the rate of the blood flow and the blood pressure.

In practice the physician either does not see the patient in the beginning of kidney involvement or overlooks the condition solely because he does not find albumin in the urine. In acute condition, when detected, many cases can be wonderfully benefited and often brought to a relatively normal condition by looking carefully for the seat of trouble, which will often be found in infected teeth, tonsils, accessory sinuses of the face, some cases of infected gallbladder, appendix, or stones and put in the kidney. I have often found the alimentary canal the seat of the trouble. By this I do not mean constipation. Many cases have a functional gastric trouble, with the accompanying intestinal condition and when these are corrected there is a vast improvement. When these conditions are not detected the process of metabolic breakdown progresses and finally results in hypertension, granular casts in the urine, or the more advanced symptoms of so-called Bright's disease. The patient has lost his opportunity and, as a rule, the condition becomes hopeless.

The apparently abnormal functioning of the kidneys, after all, may be rather in the nature of a protective process and not a destructive one. This was set forth in a series of papers by Edmund Andrews and his associates in several articles appearing in the A. M. A. Journal and Archives of Internal Medicine. In his conclusions he states, "It is probable that nephritis is not a renal disease, but a disturbance of the mineral metabolism, causing a disintegration of the great parenchymatous organs, which allows the proteins to leak into the blood and pass through the kidneys as foreign proteins. By some unknown mechanism this process, once initiated, is likely to continue and involve the leakage of blood proteins as well."



Some years ago Fischer wrote extensively on the causes of edema, and his conclusions were that it is concerned with the behavior of colloids. The colloids are briefly the condition of matter that is intermediate between solutions and suspensions of solids in liquids. There are several classes of colloids, but we will deal only with the albuminous form, one characteristic of which is the affinity of the internal phase for water of which they may contain as much as 90 per cent. Working on this theory of colloids as the cause of edema in Bright's disease, Thomas and Andrews devised a simple apparatus for testing the affinity of blood serum for water, normal salt solution, and weak hydrochloric acid. They were astonished to find in the edematous individual the colloids were not already saturated with water, as was generally thought, and would therefore swell less on dialysis than in the normal, but to the contrary found that the normal sera did not swell at all, comparatively, never more than 9 per cent, while the serum from the cardiac and nephritic cases suffering with uremia and edema would swell often over 50 per cent. They also found that the swelling was not dependent upon the CO<sub>2</sub> acidosis, the urea, the sodium chloride, or the protein contents of the sera. As a matter of fact, the so-called Bright's disease cases have a very decided decrease of the protein content of the sera. They concluded "that in nephritis and edema there is some change, either in the chemical composition or the colloid dispersion of the proteins themselves, which render them capable of absorbing far larger amounts of water than normal sera." (Thomas & Andrews, *A New Dialysis Test for Tissue Thirst*. From the Department of Surgery of the University of Illinois.) This combination of water with colloids lessens the amount of water in the blood stream and this causes the suppression of urine which is not due to the kidneys being impermeable to water.

In handling the nephritic case, being guided by the pathology and neglecting the physiology, we have centered our studies on the end findings in the kidneys with the accompanying symptoms of edema of the tissues, dyspnea, and the nervous manifestations, treating them symptomati-

cally with so-called diuretics, heart stimulants, and nerve sedatives. While if we were to give our attention to what is actually taking place in the body we would find there is a loss of proteins in the blood stream, the fibrinogen, globulin, albumin, etc., often a loss of sodium chloride, an upset of the alkaline reserve, and an accompanying acidosis, a loss of water, a lowering of the number of blood cells and the percentage of hemoglobin, with a retention of the nonprotein nitrogen compounds and an imbalance of mineral contents.

On autopsy we find the greater portion of the chlorides are concentrated in the liver and also in the brain, produces a so-called edema of the brain. This condition of the brain accounts for many of the terminal symptoms of so-called uremia.

### Conclusions

Bright's disease is not a primary disease of the kidneys, but is the result of a general metabolic breakdown of the entire body structure.

The symptom albuminuria is probably protective. On further subdividing the albumin we find that first we have proteins derived from liver tissue, the peptones, and, as the disease progresses, serum albumin. The peptones and liver tissue proteins are foreign to the blood stream, and if retained act as a poison to other tissues. Therefore they are eliminated as a protective process.

Edema is not due to a failure of the kidneys to eliminate water, but to the proteins from the blood stream entering into the tissues as colloids and there absorbing water and sodium chloride, thus lessening the blood stream proteins, water, and minerals.

The kidneys fail to eliminate water, not because of a damaged kidney filter so much as to the lack of water in the blood stream to eliminate.

Uremic convulsions and coma are not due to urea, but to the chlorides which are in excess in the brain, producing edema with increased pressure, which brings on convulsive seizures. Very often a spinal puncture will relieve this symptom.

Coma is due to an acidosis, but not of the Co<sub>2</sub>, or ketonic, type, but to lactic acid

and the acid phosphate retention. In this type of coma we find somnolence, vomiting, and Kussmaul type of respiration, as in diabetes.

The determination of the proteins of the plasma is of more value than the nonprotein nitrogen determination.

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## OMENTOPEXY IN CIRRHOSIS OF THE LIVER IN CHILDREN

### Report of Case

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The infrequency of cirrhosis of the liver in children and the rarity of good result following omentopexy, make the following case worthy of report.

Relative to the infrequency Kerley says "It is one of the curiosities of paediatric practice, all the cases reported represent roughly speaking the observations of as many men."

#### History

A girl, aged 11, was admitted to the Macon Hospital July 25, 1924, on account of swelling of the abdomen. Because of the tender age and ignorance of the patient little information could be elicited. Her father had been dead two years. She had had measles several winters ago, but other than that she had been healthy.

The present disability began about four months ago, when she noticed a tense symmetrical swelling of her abdomen. This increased continuously until admission. About a week ago her feet and ankles began to enlarge and became edematous. She had not been confined to bed and had not been inconvenienced in getting about. She had had occasional attacks of nose bleeding. The pulse ranged from 110 to 130. Temperature range was from normal to 102 for the several days before operation.

#### Physical Examination

The patient was pale and anemic with marked distention of abdomen. Her skin was dry. The tonsils were diseased, the teeth in fair condition, the posterior cervical and right epitrochlear glands were palpable. There was no noticeable enlargement of the heart, but there was a slight systolic murmur best heard over the apex. The lungs seemed normal.

July 27, 1924, after 2900 cc. of clear fluid had been withdrawn from the abdomen with no unpleasant symptoms, the liver appeared to be about two finger breadths above the costal margin. The specific gravity of the ascitic fluid was 1.006; 10 per cent of its cells were polymorphonuclears, 90 per cent lymphocytes.

#### Operation

July 31, 1924, a right rectus incision was made and a large amount of fluid escaped from the abdomen. The liver was small, hard and nodular. Its surface was hobnailed and mottled. The peritoneum was separated on each side of the incision for about five inches, the omentum drawn through and the peritoneum closed snugly around the base.

It was then spread fan-wise to the depths of the pockets made and tacked in place. In separating the peritoneum beyond the margin of the incision she complained of pain and a small amount of ether was administered. The liver and diaphragm at this time were rubbed with gauze. The patient was awake at the time the wound was closed. She reacted well from the operation with the pulse ranging about 10 beats more than before operation.

#### Course

She had some leakage of fluid from the wound for several days following operation. The abdomen seemed to be rapidly filling with fluid and ten days after operation it was again tapped and 3450 cc. of fluid drawn off. September 1, 1924, 2800 cc. of fluid was withdrawn. This was the last time she was tapped. One week after operation she was given 10 minims of saturated solution of potassium iodide and  $\frac{1}{2}$  grain of protiodide of mercury until she left the hospital and told to continue this treatment for some time. She was discharged from the hospital about ten weeks after operation. The temperature had gradually returned to normal.

Her subsequent convalescence was slow. She rapidly gained weight and strength and after five or six months resumed her usual duties with the class. In the spring of 1926, the attending physician stated she had some edema of the legs and feet and, he thought, some beginning ascites. He gave her "mixed treatment" for two months and the swelling disappeared.

November 1, 1926, the patient seemed a strong and healthy-looking girl of good color. There was a moderate systolic murmur best heard at apex. Over the abdomen was a well-healed incision, without evidence of hernia or weakness; the liver dullness was two finger breadths above the costal margin, and there were no physical signs of fluid in the abdomen. A Wasserman reaction was reported negative. A month later the child was readmitted to the Macon Hospital following a severe attack of tonsillitis. The tonsils were removed under ether, but because of hemorrhage bleeding vessels were ligated later under ether.

Following the operation she began to run a temperature of 99 to 103 and it appeared as though she had developed a septicæmia. Her pulse ranged from 100 to 150, the leucocyte count was 22,000 of which 90 per cent were polymorphonuclears. The urine showed a heavy trace of albumin but was otherwise negative. The abdomen began to swell about one week following the operation and on December 23, 6,000 cc, was withdrawn. Her condition from the time of operation gradually grew worse and she died January 2, 1927.

The diagnosis on the chart was chronic tonsillitis, chronic endocarditis, cirrhosis of the liver and acute



septicemia following operation for the removal of her tonsils.

"The cause of the cirrhosis in this case is obscure. Because of the unusually successful surgical outcome and because she was for a short period treated with iodide and mercury, even though the liver was of the small and atrophic type, syphilis might have played some part.

"After a search of the available literature, inquiry, and abstracts from the department of research of the American College of Surgeons and Nelson's Research Service but few cases of cirrhosis in children in which operation was done have been assembled. Ginsberg and Kay report one case in a child of 11 years. (Thalma Morrison operation) with fatal outcome. Elliot and Colp report twenty-three cases operated upon at the Presbyterian Hospital in New York in seventeen years; two patients only were under 20 years of age and both died. W. J. Mayo reported twenty-eight cases of the Thalma-Drummond-Morrison operation but does not mention whether or not any were children. Four patients died following operation, eight died at various times after the operation, five reported their condition as good and the remainder more or less benefited.

The operation of omentopexy has a reasonably sound scientific and mechanical basis, that of diverting the blood-stream away from the liver. There has been a small but sufficient number of cases cured and improved to make it an acceptable surgical procedure in cases that might otherwise seem hopeless.

In the case of this patient, it would seem, since her physical condition apparently was so good on November 1, that, had not tonsillectomy been done, she might have had a number of healthful years ahead of her. Certainly it would seem that omentopexy had given sufficient collateral circulation to prevent the accumulation of fluid in the abdomen over a period of two years.

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## TULAREMIA\*

### Case Report

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Cuthbert

On December 24, 1929, A. H., age 21, went rabbit hunting while visiting near Americus. He found a rabbit in its bed, killed it, cleaned and dressed it. He noticed about the same time a small abrasion on the back of his left middle finger that he thought was due to a briar. About twenty-four hours later, he began to feel bad and felt as if he had fever. He noticed at the same time that his left arm was sore just above the elbow and there was soreness under the arm. Large kernels were felt in both places. During the next few days Mr. H. had severe headache as well as general aching. He took aspirin and other simple remedies, but did not improve. He returned to his home in Randolph County on December 29.

Mr. H. came to my office January 1, 1930, still complaining of headache and feeling bad generally. His temperature was 102.2 and his pulse was 106. He had no respiratory symptoms. The left epitrochlear lymph node was about the size of a lemon and tender. There was some redness over it. The left axillary nodes were much enlarged and tender. There was a small wound on the left middle finger that had some pus in it. A smear was made from the pus, but no organisms were found. A tentative diagnosis of tularemia was made. A specimen of blood was sent to the State Board of Health Laboratories for examination for tularemia. The report was doubtful. The patient was put to bed and given soft diet and plenty of liquids. Wet dressings of Hexylresorcinol Solution (S. T. 37) were applied to the infected finger. The patient was given aspirin and codein. In a week's time he felt better, but the glands were still enlarged and tender and he did not feel like work. January 6 another specimen of blood was sent to the State Laboratories and it was reported weakly positive for tularemia. The patient was allowed to be out of bed and he tried to work, but was unable to do so. His temperature was only about 99 in the afternoons when the second specimen of blood was taken. He has gradually gotten better, but continues to have enlarged and somewhat tender lymph nodes. He was seen last January 18 and his temperature was 98.2 in the afternoon and

\*Medical Department of Patterson Hospital, Cuthbert, Georgia.



**THE JOURNAL**

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

APRIL, 1930

**CONGENITAL HEART DISEASE**

The remarkable thing about the development of the embryo is that it so seldom errs and strays like a good Episcopalian. When maldevelopment does occur, it is interesting both as a curiosity and as a light on the normal processes. The embryology and the pathologic embryology of the heart are fascinating. Occasionally the general practitioner will deliver a blue baby, who soon dies from gross cardiovascular defects: such an experience may make him feel that the outlook is hopeless in congenital heart disease.

In a well-known clinic in the goiter belt, the sections devoted to diseases of the heart and of the thyroid gland are closely allied: for years it has been almost a matter of routine to secure one or more basal metabolic rates on patients suffering from heart failure. When heart failure is caused by exophthalmic goiter or adenomatous goiter with hyperthyroidism, and the causative disease has not been active too long, thyroidectomy cures these patients of their cardiac symptoms. In addition, heart failure, secondary to arteriovenous aneurysm, has been relieved by surgical intervention in several instances. It is doubtful, to say the least, if any other type of heart disease has ever been cured. The thesis is accordingly advanced that the physician can do as much for a cardiac anomaly in an adolescent or adult as for any other cardiac condition he may encounter.

The practitioner may, if he looks for them, observe various cardiac anomalies among the infants and children, if not among the adults, in his practice. It is to be remembered that not every case exhibits cyanosis and it is impossible to evaluate the various less serious anomalies among the infants and children, if not among the adults, in his practice. Many subjects suffer no serious symptoms until the terminal illness, which may be dramatically

brief; sudden death during or shortly after a strenuous game is not infrequent. Therefore no boy or girl should be allowed to take part in strenuous athletic contests without a physical examination, including determination of blood pressure. In many states the law requires this before participation in any interscholastic game.

When the diagnosis of congenital heart disease is made, certain things should be done:

1. The patient should be protected as far as possible from infectious diseases, any of which may leave their footprints in the myocardium. Pulmonary tuberculosis is also a frequent cause of death: this constitutes an additional reason for careful observance of the laws of hygiene.

2. The patient should strictly live within the limits of his cardiac reserve. Digitalis is of relatively little value after decompensation develops. Last spring White and Sprague reported the case of an unusual severe cardiac anomaly with death at 59 years from cerebral hemorrhage. This man had always had to limit his physical activities, and yet he was fortunate in having such intelligence and character (and medical advisers) that he was able to raise a family and round out a career of distinction in his chosen field.

3. Since almost a third of persons with congenital cardiac disease who survive infancy die of subacute bacterial endocarditis, all possible foci of infection, especially diseased tonsils, should be removed.

Galen's maxim, which he probably cribbed from Hippocrates, "Be careful to do no harm," applies with particular force to cases of cardiac anomalies. The most important thing for the family doctor to do is not to inflict a cardiac neurosis (which may cause more trouble than the lesion) upon the patient or his family. A highly neurotic daughter of a highly neurotic mother wished to play basketball. At the required physical examination a precordial murmur was detected and she was advised not to play basketball. The girl, however, went home to bed, and stayed there three years. Finally, apparently she tired of such an existence and she was brought on a stretcher to consult an eminent cardiologist. It was a relatively simple mat-

ter to establish that the murmur was due to a developmental defect of no great importance, but to convince the mother of this and to teach the patient to walk again was a matter of the greatest difficulty.

The physician should give a conservative prognosis. In order to make this as accurate as possible, to gratify his scientific interest and advance knowledge, but only for these reasons, he should attempt to make the diagnosis as exact as possible. The details of differential diagnosis are fully covered in Maude E. Abbott's classic monographs in Osler and McCrae's *Modern Medicine*, and in Blumer's *Bedside Diagnosis*. Her painstaking and critical summaries of the literature and her own original studies have greatly clarified the subject and emphasized its clinical importance. The medical profession owes a great debt to Dr. Abbott, for she is responsible for much of the present dissemination of knowledge and interest on the subject of congenital heart disease. L. M. B.

### AUGUSTA MEETING

The members of Richmond County Medical Society are looking forward with pleasurable anticipation to May 14-15-16, at which time they will have the honor and privilege of entertaining the members of the Medical Association of Georgia and the Woman's Auxiliary to the Association.

Organization has been perfected, all committees appointed looking to the proper conduction of necessary business by Council and House of Delegates, and the presentation of the scientific program under favorable and comfortable conditions. All Augusta eagerly awaits the coming of the doctors, their wives and daughters, also the sweethearts of the unmarried doctors. The ladies are especially anxious to give to the members of the Woman's Auxiliary of the Medical Association of Georgia a genuine and delightful type of Southern hospitality, labeled "Augusta Brand." *They not only want, but expect, every member of the Woman's Auxiliary to come to Augusta.*

The Woman's Auxiliary of the Richmond County Medical Association, for reasons per-

haps too complicated to elucidate or comprehend, passed, about two years ago, into a state of suspended animation, but its assumption of a resting phase is like that of the Lepidoptera. Spring is now here, the chrysalis is swollen to the bursting point, and by the time of your arrival it will be waiting with its new wings and its full spring enthusiasm. It is quite anxious to equal, if not excel, the generous and royal entertainment accorded the ladies at Macon last year. If the fair sex will accept a tip from the General Committee on Arrangements, "Do not miss the Augusta meeting or you will live to regret it."

The large majority of the Augusta physicians will keep "open house" during the meeting. Everyone who has been to Augusta knows what this means, nothing too good for our friends; you are welcome to the best we have; enjoy it and you will give us great pleasure.

Make your reservations at Partridge Inn, one of our tourist hotels, which is headquarters for the association. Practically all of the activities will occur at this hotel or at the nearby country clubs. Rates are reasonable and based on the American plan (with meals), \$5.00 a day per person, with two or three to a room. Adjoining the Partridge Inn, fifty yards distant, are the George Walton Apartments, attractive and first class: rates \$5.00 a day with one or two to a room, with meals; \$3.00 per day, per person, without meals.

A revised list of committees appointed by the Richmond County Medical Society appears in this issue. Write the chairman of any committee, who will be glad to serve you in any way.

Make your arrangements now to come to the Augusta meeting, otherwise you will miss something worth while. We expect a big crowd and will promise you a profitable and delightful time.

Yours to serve,

GENERAL COMMITTEE ON ARRANGEMENTS.

P. S.: The price of charred kegs has recently advanced in Augusta. Why, we do not know, but the committee on liquid refreshments might be able to tell you.



## HEALTH EDUCATION

During the present year the Medical Association of Georgia has endeavored to demonstrate its interest in all worthy matters within its field. It considers all matters directly concerned with the eradication or control of disease of prime importance, and directly in line with its broad policies of aiding the human race. It has occurred to the officers of your association that an intense campaign against preventable diseases should be undertaken by it, with the prime object in mind of educating the public relative to the physical and economic destruction done by them and the means necessary to be used to control or exterminate these diseases. It was thought that the intelligent public would, with this information acquired, develop a more co-operative spirit in conjunction with the control work being done by organizations interested in the many phases of health. Hence, a Health Education Week was born.

For this purpose an organization was perfected composed of a committee with representatives from the Medical Association of Georgia, State Board of Health of Georgia, Emory University School of Medicine, University of Georgia Medical Department, and the Division of University Extension. With these, other bodies have agreed to co-operate—namely, the Woman's Auxiliary to the Medical Association of Georgia, the Parent-Teacher Association, and the State Tuberculosis Association. Locally, chairmen have been appointed and these will develop their plans of the meetings.

The Health Education Week is one of the greatest projects which has ever been undertaken by this association. It has the possibilities of being the most far-reaching event that has been proposed for years. It will, I hope, have the happy result of welding into closer union for a common good the several great and influential bodies working on this program. It should awaken more interest in a large number of members of our Association, because men are aroused by an active organization which gives them certain duties to perform in its behalf, and I might say there will be more active workers of the pro-

fession in this campaign than have ever before worked for their Association at one time. It will also be educational to those who address audiences, as they must necessarily prepare their addresses. But above all it will teach the great lesson of unselfish labor in behalf of the people by the profession and other associated bodies in the Health Education Week campaign, and finally it will transmit valuable information about prevention of disease, which will elicit the co-operation and support of the people as a whole, in the work against disease by organized medicine and health bodies.

It is proposed to hold health meetings in one hundred cities in Georgia during Health Education Week, May 5th to 10th, and we desire all physicians who wish, to take an active part. Notify your local chairman or the secretary of the State Association. Your help is needed. Your assistance will be appreciated.

WM. R. DANCY, M. D., *President*,  
Medical Association of Georgia.

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GEORGIA HEALTH WEEK IN  
FULTON COUNTY

The Medical Association of Georgia, with the co-operation of the Medical School of Emory University, the University of Georgia, State Board of Health, and the Georgia Anti-Tuberculosis Association has formulated plans for a state-wide educational campaign in the interest of good health for the week of May 5th to 10th, inclusive. Sporadic efforts in this direction have frequently resulted from the activities of individuals, or committees, representing the organizations that now unite to sponsor this general movement as well as from the activities of other groups such as Civic Clubs, Parent-Teacher organizations, the Woman's Club, and the like. That earlier movements, although making local appeal, have contributed much to the development of a health consciousness amongst our people generally, no one will question. It is believed, however, that the impress and effectiveness of such campaigns may be multiplied many times over those of past efforts through unified action. All agencies, therefore, interested in



the physical welfare of our population are urgently requested to join the sponsors of this first Georgia Health Week, which it is hoped will have more than an indifferent appeal to the people. It must be admitted that the greatest prize one can possess in this life is a body adorned with spiritual, mental, and physical fitness. The attainment of these qualities should be of general concern. There are three groups that have long made it the special aim of their professional activities to confer these blessings, not upon themselves alone, but primarily to embrace through general education the rank and file of our people. It is not surprising, then, to find our teachers, ministers, and physicians covenanting with each other to launch this movement. Georgia Health Week, moreover, seeking to unite these powerful agencies in a concerted effort to promote the attainment and preservation of good health, would make it a veritable passion, since we believe both mental and spiritual development are enhanced by, if not largely dependent upon, the possession of sound bodies.

To such a splendid enterprise, the Fulton County Medical Society proposes to give the full weight of its endorsement and the maximum of its co-operative effort. Some one-sixth of the population of Georgia resides in our metropolitan area. Aside from the responsibility that rests upon us as a profession, charged with the physical welfare of this vast group of the State's population, pride prompts us to extend ourselves to maintain that leadership in this campaign with which we have been rewarded for past efforts in matters pertaining to the advancement of scientific medicine generally. Such leadership, however, has not come to us by accident. Our members have paid the price in earnest effort and through a spirit of loyalty to a cause considered worthy of our best thought. This appeal, then, is to the individual member to the end that collectively we may reach a goodly proportion of our population with the "Good Health Message" during the first week in May. The "Annual Round Up" of our local Parent-Teacher organizations has joined with us this year, which guarantees the enthusiastic

help of this splendid group. The Woman's Club, the Fifth District Dental Association, the City and County Health Departments, the City School System, the Auxiliary of the Fulton County Medical Society, the City Government, have all assured us of their hearty co-operation and have offered the facilities of their standing committees on Health Extension Education. Lastly, but of outstanding import, our own society has voted financial aid in a substantial amount to defray certain necessary expenses connected with this campaign. Such a magnanimous spirit cannot fail to impress the people who have thought of us too much in the past in terms of exploiters of their physical frailties. But we need, even more than money, the willingness on the part of each member to respond to calls for personal service which the magnitude of the job will require. "'Tis not the individual nor the army as a whole, but the everlasting teamwork of every blooming soul," that is needed. Hear now the call to arms.

C. W. ROBERTS, M. D.,  
General Chairman, Fulton County.

#### NEGRO PHYSICIANS' POST-GRADUATE WEEK

Emory University, in co-operation with the State Board of Health and the Children's Bureau, Department of Labor, Washington, D. C., is now planning a post-graduate course in general medicine and obstetrics for the colored physicians of Georgia. This school will be held at the colored section of Grady Hospital, beginning Monday morning, June 16, at 9:00 o'clock, and continuing through Friday, June 20. The detailed lecture program is now being worked out, and definite announcement will be made at a later date. The subjects to be covered, however, are syphilis, obstetrics, cancer, gonorrhea, infant feeding, early diagnosis of tuberculosis, gynecology, acute surgical abdomen, cardio-renal vascular, the State Board of Health Laboratory, health laws, including sanitation and quarantine. Arrangements are being made for the meeting of the Georgia Medical Association (colored) in Atlanta at the same time. The entire day Wednesday, as well as the afternoons

of Thursday and Friday, will be taken up by the State Association.

This, so far as we are informed, is the first post-graduate course for negro doctors that has been arranged by any Southern group. The prospect now is that this week of study will be well attended by the colored doctors.

JOE P. BOWDOIN, M. D.

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### CHATTAHOOCHEE VALLEY MEDICAL AND SURGICAL ASSOCIATION

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#### *Annual Session*

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The Chattahoochee Valley Medical and Surgical Association will meet this year in Albany, Ga., July 8-9, 1930. Albany is in the heart of the great industrial and agricultural section of South Georgia. This territory holds within its borders many of the substantial and progressive members of our profession who are always ready to lend their presence to a medical gathering when the program offers helpful suggestions concerning the problems met in their daily labors. Within easy reach by train and automobile are the physicians of Southern Alabama, Northern Florida, the Valley of the Chattahoochee and the larger cities of Georgia and contiguous States.

A record-breaking attendance at Albany is expected and may be attained if the friends of the Chattahoochee Valley Association will but bestir themselves. The services of this unique organization, shorn of medical politics, presenting a paucity of frills and furbelows and always rich in medical meat and good-fellowship, has long been felt in the territory bordering on the Chattahoochee Valley. Its place cannot be filled by the other splendid meetings of our profession and its past labors are too rich in helpful results to permit of its neglect. We have many medical meetings, to be sure, but this one is true and tried and, like a good friend, should be "grappled to our souls with hoops of steel."

Is it too much, then, to ask that all physicians, wherever located, interested in the promulgation of medical art and the cultivation of closer co-operation through the

strengthening influences of social contacts, be requested to reserve Tuesday and Wednesday, July 8-9, 1930, for this meeting, to the end that we may have a creditable gathering to hear and participate in this year's program. It is being prepared with the sole idea of giving to those so situated as to be unable to keep abreast with the rapid advances in medicine, a practical resume of the past year's contributions to our profession. Those desiring to submit titles to be considered in the preparation of the program are requested to promptly communicate with the undersigned not later than May 20, 1930. Membership in the association is secured through registration at the annual session. Reputable men wherever located are eligible. You are invited to attend. Come and give to the meeting the results of your own experiences and in turn learn of those of your fellows.

C. W. ROBERTS, M. D., *Secretary*.  
26 Linden Avenue, Atlanta, Ga.

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### WHY A STATE MEDICAL JOURNAL?\*

J. H. MUSSER, M. D.

There is some question as to just why a state medical journal should exist. There is no doubt that if we take the average state journal, look it over rather carefully, we will find it represents no contribution to medical literature, using literature in the sense that it is writing which should survive. That does not say, however, that a state medical journal as such does not have a very real place in medicine. It is true that it may represent merely a journal of current activity. It may be that it is extremely provincial in its outlook, but nevertheless it does supply, I think, a want of the medical profession as a whole.

I should like to take up in order the different sections in my own particular state medical journal, which represents not only Louisiana but also Mississippi. First, a word as to the scientific material. I think that the editors who are here today would agree with me that the material we get, aside from its scientific value, is often extremely poorly prepared. That is to say, the manuscripts are received in such form that it is often very difficult to interpret not only what the author has to say but also actually to read

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\*Abstracted from the American Medical Association Bulletin, February, 1930.



the material and to prepare it for the printer.

The most obvious and the grossest errors occur in the preparation of the bibliography and references. I do not think many authors have heard of the little book gotten out by Dr. Fishbein of the American Medical Association on the preparation of manuscripts. Certainly it would help them to read the section referring to the preparation of bibliographies. Very frequently, indeed, I get bibliographies that are copied, a most reprehensible practice and one which I believe is actually dishonest. There is no way of correcting this practice, I think, except to point out to the men that it is not justifiable for them to copy somebody else's work. It certainly shows that they have not referred to the original work which they are attempting to quote.

The type of material that we get consists of reports of experiences of the average physician. It represents sometimes merely a review of a subject. Again, it may be an address, or it may be of a scientific character. By that I mean the person who has presented this particular type of manuscript to the editor, or has read it at the state medical society, has attempted to confirm, to disprove, or to follow up the experiments of others. It is extremely rare for the average state medical journal to publish original investigative material that is of any value. You cannot blame the authors. The scope of the medical journal and the number of subscribers is decidedly limited, and if the authors have anything very much worthwhile, naturally they want to put it into one of the national journals, or a journal which devotes itself primarily to certain branches or phases of scientific medicine.

I think, really, that almost the greatest value of the medical journal to the general practitioner of the state is that it gives him the opportunity of reporting material when other journals are unavailable; unavailable often because the character of work is such that it does not require national broadcasting, and unavailable also because there are many journals which would be very glad to accept manuscripts but because their character is such that the average medical man who has any sense of decency whatsoever does not care to publish material in those journals. The article itself, the paper, educates the person who writes it. It may not edify the reader particularly. Possibly it does inform him and helps to educate him, but undoubtedly any man who prepares a paper does do something to push forward his own education. He has to read; he has to observe more critically and carefully, and in the doing he is educating himself.

One of the very real functions of the state journal, aside from the opportunity of presenting scientific material, is the publication of news notes. These notes are of an entirely local character, of course, and have to do with the happenings, the actions, and the deeds of the members of the county or state organization. It would not be particularly edifying nor interesting to see in a national journal that Dr. So-and-So of Goodness-Knows-Where has been recently made the father of fine twins, or some such item as that, but it does give personality to the local journal. These little personal touches, I think, add very much to news notes in a state journal and also give the opportunity of telling what is going on in the local hospitals, the character of the work they are doing, changes in the staff, and so on. The news notes should, of course, include reports of the parish and county medical societies' doings. It brings together the subdivisions of organized medicine better than any other means I know of.

Case reports should be included in the state medical journal by all means. The average physician has, I believe, a great deal of hesitancy in submitting a case report to one of the larger journals. There are, undoubtedly, innumerable cases of rare and unusual diseases and disorders which should be recorded in literature, even if there is just a comparatively brief statement of the condition, but which necessarily cannot go into the larger journals. Here again we have an opportunity of taking advantage of the state medical journal. Reports of hospital staff meetings as well should be incorporated. They are of local interest, but sometimes they bring forth case reports which are worth recording.

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## ARE THE STATE DUES EXCESSIVE?

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### *Abstract*

We are all concerned about the high cost of living. The question, however, of keeping expenditures within the limits of income resolves itself in most instances into the use of judgment in the matter of expenditures. The sum total of money foolishly spent by people in general is appalling. We physicians, both individually and sometimes collectively, are not exceptions in this respect.

The question has been raised in various quarters whether the money being spent by our State Association (and the yearly total has shown a marked upward trend in recent years) is being wisely expended. The Council of the State Association is the financial body of our organization and authorizes the



expenditure of the income of the association which for the most part consists of the dues voted by the House of Delegates. We members, therefore, through our self-assessment have made possible the rather considerable sum available the past three years. The House of Delegates, realizing the need for more funds if the proposed program of expansion was to be carried out, voted the increase of state dues to \$15 effective in 1927. Some members have begrudgingly paid the dues, but apparently few, if any, have given up their membership on account of the dues, judging from the membership roll, for in 1929 our membership was the largest in history.

Now just what has been accomplished with the \$15 membership?

In the first place we have a real organization and a secretary in Dr. E. A. Myerding who has not only the ability but the time to devote to association affairs. We have a long list of committees that have been conscientious in tending to their duties and have undoubtedly been more efficient because of the aid given them by the organization in general and the secretary in particular.

The committee which has accomplished the most and naturally has spent the most has been the Legislative Committee. Not one man in a thousand could or would have done the work that Dr. Herman Johnson has done with the legislature the past few years.

If it had not been for the Legislative Committee tax-supported hospitals would have been opened to the medical cults; the laboratory of the Venereal Division of the State Board of Health would probably have been discontinued, and a limit would have been placed by law on medical fees coming under the Industrial Commission.

The next most expensive committee of the association has been the one on Public Health Education. The activities of this committee have been so diversified and its influence has been exerted in so many directions that the results are less tangible. They undoubtedly are nevertheless far reaching. The efforts of this committee have been to foster medical influence in the direction of the various health organizations in the state. This has been accomplished in part through county society committees on Public Health, by assisting health organizations in putting on approved programs and by assisting the Minnesota Public Health Association in the preparation of its publications and otherwise. Weekly newspaper service has been conducted throughout the state and radio talks have been furnished.

One of the worthwhile undertakings of the association which should be mentioned is the Consultation Bureau conducted by Dr. W. A. O'Brien in Minnesota Medicine. The county secretaries' conference has been made possible by the increase in dues and the annual meeting is no small item of expense.

While we do not approve of extravagant expenditures by the State Association, the above recital seems to substantiate the view that there has been value received. The whole question is whether we are to continue to be an organization which, through its various agencies, is going to make its influence felt, or whether the State Association is to revert back to its former condition of innocuous desuetude.

Editorial, Minn. Medicine, April, 1930.

### REPORT OF THE CRAWFORD W. LONG MEMORIAL PRIZE COMMITTEE

It is well known to you that the Crawford W. Long Memorial Prize is offered by a generous donor for essays on original work of meritorious caliber, the essay being presented at the annual convention of the Medical Association of Georgia, and submitted within two months to the committee in charge.

The committee regrets very much to report that there were no essays offered this year in competition for this prize.

The committee has made special efforts to give this matter publicity and we trust that at the present convention there will be several contestants for this prize.

WM. R. DANCY, M. D., *Chairman.*

V. P. SYDENSTRICKER, M. D.

GEORGE W. BACHMAN, M. D.

STEWART ROBERTS, M. D.

R. V. LAMAR, M. D.

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#### EXAMINATIONS

Examinations will be held in Augusta, June 4, 5, 6; Atlanta on June 11, 12, 13.

# HEALTH EDUCATION WEEK

## PROCLAMATION

WHEREAS, The good health of the citizens of this state is of paramount interest and importance to the state, the happiness and prosperity of the commonwealth and the people depending on physical well-being, and

WHEREAS, The Medical Association of Georgia, the Georgia State Dental Society, the medical departments of Emory University, and the University of Georgia, the Georgia State Board of Health, and the Georgia Tuberculosis Association have banded themselves together for an intensive week of dissemination of health education during the week of May 5 to 10, 1930, and

WHEREAS, Health education is the primary step toward universal physical well-being, enabling all persons to know the fundamentals of properly caring for themselves and insuring healthy conditions of minds and bodies;

THEREFORE, I, L. G. Hardman, Governor of the State of Georgia, do hereby proclaim the week of May 5 to 10 as HEALTH EDUCATION WEEK, and call upon all citizens to lend aid for the movement of health education; to attend the clinics and lectures that will be disseminated by these combined agencies during that week, knowing that adherence to the precepts and principles enunciated will result only in lasting good and benefit to this state and its people.

Given under my hand and Executive Seal, at the Capitol, in the City of Atlanta, this the 26th day of March, 1930.

(Signed) L. G. HARDMAN, *Governor*.

## PRESIDENT'S INTERVIEW

Dr. William R. Dancy, Savannah, president of the association, gave out the following interview on March 21st:

Q. Dr. Dancy, it is understood that a Health Education Week will be held in next May. Is that true?

A. It most assuredly will be held.

Q. The dates, please.

A. May 5 to 10, 1930.

Q. What was the origin of Health Education Week and who is fostering it?

A. The plan of Health Education Week originated in the Medical Association of Georgia. Its officers presented the idea to representatives of the State Board of Health, Emory University School of Medicine, University of Georgia Medical Department, and the Department of University Extension, and all received the idea enthusiastically, each

being pleased at the opportunity of being or real service to the public. So you see these bodies with the Medical Association of Georgia are each equally co-operating in this splendid movement.

Q. What is the purpose of Health Education Week?

A. For years various organized and state bodies, interested in the betterment of health conditions in this great State of Georgia, have endeavored to do many things to control or eradicate certain preventable diseases, which are laying low its population and thereby causing losses amounting to millions of dollars annually. Although this work was done at no expense to the citizens, much active opposition was encountered and when this was not in evidence, passive opposition was there. Co-operation locally was often lacking. The natives seemingly felt that these health enthusiasts were intruding upon their properties and rights.

We, believing that this active or passive opposition was the result of a misunderstanding, thought it a splendid idea to set aside one week, the first week in May, as Health Education Week. Now the purpose of Health Education Week is to inform the public, especially those of the rural districts, as to why we go to their communities and insist upon drainage, good water, screened houses, the wearing of shoes, etc. We want to tell them that the representatives of these excellent organizations are the best friends they have, and that they will tell them during Health Education Week how to keep well, how to eradicate malarial fever, hook worm, typhoid fever, smallpox, undulant fever, etc. With this information, we are convinced that every one will work to keep himself well and aid us in the effective work of eradicating disease.

Q. What prompts your association and its affiliated bodies to undertake this great task?

A. The medical profession has been known from time immemorial as being the greatest benefactor of the human race. It feels that it is its duty to prevent diseases among the people. To perform this duty produces (develops) a great sense of self-satisfaction to every physician. The greatest and most far-reaching deeds of the medical profession today are done without hope or desire for reward.

Q. Are there others interested in helping the Health Education Week plan?

A. Yes, there are many splendid organi-



zations. Among those who will give their time and efforts are the Parent-Teacher Association, the State Tuberculosis Association, State Dental Association, the Woman's Auxiliary to the Medical Association of Georgia, all the civic clubs of the State, all the churches, all the schools and other educational bodies, trade bodies, moving picture corporations, local city governments, and others.

Q. In how many places will the work be carried out?

A. In just as many as want it. Thus far seventy-five towns are planning the Health Education Week under the supervision of a local committee who is generally the president of his local medical society.

Q. Can other places get this Health Education plan for one or more nights and how?

A. Yes, any town or community may have it presented to them in some form by communicating with Dr. Allen H. Bunce, secretary-treasurer of the Medical Association of Georgia, 139 Forrest Avenue, N. E., Atlanta.

Q. What do you think of Health Education Week?

A. I believe it to be the greatest thing that the profession and its allied organizations in Georgia have ever undertaken for the public and that the results will be very far reaching and productive of inestimable good. I am assured of widespread public interest and enthusiasm and a large attendance at all meetings.

#### 'TB' WARRIOR LAUDS HEALTH EDUCATION WEEK AS BIG STEP

Checking up on one's self periodically is a duty every citizen owes not only himself but his state and country, according to James P. Faulkner, director of the Georgia Tuberculosis Association. Mr. Faulkner stressed the importance of observance of Health Education Week, May 5 to 10, which is being promoted by the Medical Association of Georgia.

Cooperating in this movement with the physicians is Mr. Faulkner's own organization, the Georgia Tuberculosis Association, together with the Georgia State Dental Society, the State Board of Health and the medical departments of Emory and the University of Georgia.

Mr. Faulkner declared a physical examination once a year, coupled with knowledge that will be disseminated during this week by those qualified to do so, will be one of the greatest means of arresting the march of tuberculosis through Georgia.

"An examination periodically will enable trained physicians to detect the first faint spot of tuberculosis," said Mr. Faulkner. "And that is where we want to catch it. If we can find it just as it shows up, it can be eliminated, whereas, if the patient lets it get a foot-

hold, the task is so much more difficult and the vitality of the patient is vastly lowered.

"The educational material that will be given out during this week will enable persons to sidestep many of the pitfalls and traps, which, if not avoided, may lead into serious cases of the great white plague.

"I strongly urge every citizen of Georgia to listen carefully and heed well the message of health that will be brought to him during the week."

#### SNELLING CALLS HEALTH EDUCATION WEEK FINE PLAN

Health and education are so indissolubly linked that Health Education Week, May 5 to 10, one of the greatest plans that could have been worked out for promoting the health of Georgia, according to Dr. Charles M. Snelling, chancellor of the University of Georgia.

The Medical department of the University, at the direction of Dr. Snelling, has joined with the Medical Association of Georgia, the Georgia State Dental Society, the Georgia State Board of Health, the medical department of Emory University and the Georgia Tuberculosis Association in promoting Health Education Week.

Continuing, Dr. Snelling said:

"Appreciating the importance of health and of correct diagnosis and treatment of disease, the University of Georgia is in complete sympathy with the state-wide observance of Health Education Week, May 5 and 10. It seems to me highly appropriate health and education should be thus associated, because these two things are closely related. Health is largely a matter of education, and education in turn attains its fullest expression when accompanied by sound health, mental and physical.

"I am particularly pleased that the University of Georgia, through its medical department, is affiliated with these other humanitarian organizations in sponsoring this Health Education Week, which is an undertaking of considerable significance for Georgia. The University, aiming as it does to serve the state, cheerfully co-operates in making available to the public the simple, elementary facts about health under the plan worked out by the committee in charge."

#### MADDOX BOOSTS HEALTH EDUCATION WEEK, MAY 5-10

Highest dividends in dollars and cents are yielded from good health than anything else, according to Robert F. Maddox, president of the State Board of Health. Mr. Maddox, perhaps, is better qualified to speak along this line than any other man in Georgia. In addition to being president of the State Board of Health, he is chairman of the executive committee of the First National Bank of Atlanta and a former mayor of the capitol city.

Health Education Week, May 5 to 10, has his enthusiastic indorsement. "Health Education Week, I am sure, has the full and enthusiastic indorsement of every member of the State Board of Health," said Mr.



Maddox. "I know it has mine. We, as a body and as individual citizens of Georgia, are sincerely interested in improving health conditions in Georgia.

"This movement, coordinating the real health agencies of the state, the Medical Association of Georgia, the Georgia State Dental Society, the Medical Departments of our two great universities, Emory and the University of Georgia, the State Board of Health and the Georgia Tuberculosis Association, cannot help but result in tremendous benefit to the state.

"It will pay in actual dollars and cents, to say nothing of the benefits to humanity, for every citizen of this state to pause for the week, take physical stock of himself and lend his aid to this great movement."

#### MEDICOS, DENTISTS PLAN TO EXAMINE GEORGIANS IN MAY

One of the greatest features of Health Education Week, May 5 to 10, will be the health examination clinics which will be conducted in many of the counties of Georgia. The function of these clinics will be to examine all people who come to them, from head to foot and all in between, in an effort to point out defects which lower vitality and make for poorer health.

Announcements will be made between now and the dates of the observance of the week as to when and where the clinics will be held, together with the personnel of the doctors to conduct them.

Doctors and dentists will go over each patient and make a thorough examination. The dentist will have charge of the mouth health examination and physicians will examine the remainder of the body.

Between now and the time for Health Education Week physicians and dentists alike welcome all questions regarding the week any person desires to ask them. The doctors of the state are thoroughly informed as to the details and are anxious that it be one of the greatest contributions ever made to the general health upbuilding of Georgia.

#### MEDICAL WORDS WILL BE AVOIDED IN HEALTH TALKS

Monster mass meetings in more than 100 cities of Georgia during the week of May 5 to 10 will be held in celebration of Health Education Week, it is announced by the Medical Association of Georgia, under whose leadership the week is being observed.

Speakers, medical, dental and lay, will address these gatherings on subjects of health applicable to each particular community. Advice will be given for application to the community as a whole as to how to improve health conditions.

All addresses will be made in language readily understandable to any listener. Much time and effort is being given by both physicians and dentists to reducing their professional terminology to language which will both describe their ideas and inform the laymen as well.

Health Education Week is being held for the lay-

men—the man who is not a physician or a dentist. It is being held for his information, to help him keep himself physically fit and thus live longer and happier.

#### EMORY PRESIDENT SAYS HEALTH WEEK GREATEST MOVE

Health Education Week, May 5 to 10, is hailed by Dr. Harvey W. Cox, president of Emory University, as a work than which none can pay greater dividends to individuals, community and state. Dr. Cox urges that everyone in the state take it as a personal matter, giving it their most serious consideration.

"The medical department of Emory University is looking forward with great interest to Health Education Week," said Dr. Cox. "From May 5 through May 10, this week will be observed in more than 100 localities throughout the state in an effort to promote health examinations and health education. This work is under the auspices of the Medical Association of Georgia, the Georgia State Dental Society, the State Board of Health, the medical departments of Emory and the University of Georgia and the Georgia Tuberculosis Association.

"The fact that 61 per cent of our people die of preventable diseases before their allotted time is sufficient evidence that we should give the question of health our serious consideration. I sincerely hope that every person in Georgia will give his hearty support to this movement for better health. I do not know any work that could give greater returns to the individual, community and state."

#### HEALTH EDUCATION WEEK GREAT MOVE, SAYS ABERCROMBIE

That the attention of every person in Georgia will be focused on Health Education Week, May 5 to 10, is the hope of Dr. T. F. Abercrombie, State Commissioner of Health, expressed in indorsing unreservedly the period of health activity planned by an amalgamation of health forces in the state.

"I don't know of a state in the Union," said Dr. Abercrombie, "so blessed that every single force for health has coordinated to foster a movement of health education. I am confident that this Health Education Week, under leadership of the Medical Association of Georgia, and participated in by the Georgia State Dental Society, the medical departments of Emory and the University of Georgia, the Georgia Tuberculosis Association and the State Board of Health, will be most productive of good for Georgia.

"Let me urge that every citizen of Georgia, man, woman and child, give thought during this week to their health. I mean real, serious thought. Have yourself checked over and see that you are right. You do this for your automobile every month or so.

"To have your own body checked over once a year is not an extravagance. It is a necessity.

"Learned doctors and laymen will convey messages on health during Health Education Week. Listen to them, for they are fraught with much for you that will make life worth living."

## FIGHT AGAINST MALARIA

It has long been recognized, although until recently seldom discussed publicly, that malaria is one of the most expensive of the ills that beset the southernmost sections of the South.

Fortunately, the South is rapidly getting over her "squeamishness" in the matter of admitting the presence of malaria and making open and scientific efforts to get rid of it. So far as The Constitution can recall, the first of the South Georgia cities to admit officially that malaria existed and then went openly to work to prevent it was the enterprising little city of Albany. Already nationally famous as a city which three times won the first prize for excellence in fire prevention, Albany started out a year ago to rid itself and its county—Dougherty—of malarial conditions. The Albany Herald led in the fight for publicity and action and the results have been felt not only in Albany, but throughout Georgia, particularly south of the fall line, which passes just below Columbus, Ga.

Encouraged by the intelligent and courageous action of Albany and Dougherty county, other towns and cities began to move against malaria. In the past few weeks there have been several malaria conferences, the most recent being held a few days ago in Cordele. There were representatives present from nine counties—Crisp, Dooly, Ben Hill, Worth, Bibb, Turner, Schley, Dougherty and Sumter—and among the speakers were Dr. Allen H. Bunce, secretary and treasurer of the Medical Association of Georgia, and Dr. T. F. Abercrombie, Georgia Commissioner of Health.

Realizing the necessity for remedying malarial conditions, Dr. Abercrombie is having printed 500,000 copies of a bulletin relating to the cause and treatment of both malaria and pellagra. These will be sent out by Secretary of State George H. Carswell in envelopes containing the 1931 license tags, and in the meantime they are available on application to the state department of health at the capitol.—*The Atlanta Constitution*, March 31, 1930.

## SUPPORT HEALTH WEEK

The amplified significance of education in 1930, as compared with the generally accepted meaning of the term a few years ago, could not more pointedly be illustrated than in the plans for Georgia Health Week, now being forwarded. The sponsors of the state-wide observance of the new principles of public health are palpably concerned with just that, public health. They wish the public to understand its part in the general scheme, so that practical co-operation can be realized. And so to that extent they are dependent, entirely, upon one of the new phases of education, which, entirely remote from campuses or classrooms, endeavors to impart facts in workaday language direct to Mr. and Mrs. Average Citizen.

This inter-relation is so obvious and the direction of its benefits so plain, that the failure of Georgians to enter wholeheartedly into the program is unthinkable. The whole project has been undertaken with the sole idea of awakening public consciousness

toward health problems as they pertain to State and community. There will be public meetings, demonstrations, and educational clinics. Competent authorities will offer information that every citizen ought to assimilate. In brief, the week of May 5-10 will be a period of education, with the instructors ready and eager to do their part if only they are granted the indispensable requirement of receptive "pupils."

Besides learning what must be done, Georgians will be astonished at what already has been done. Let every citizen do his simple part toward making the week, upon which so much unselfish time and effort will be expended, a signal success; and its success means that each will be a beneficiary.—*Editorial Atlanta Journal, Atlanta, Ga., April 13, 1930.*

## HEALTH EDUCATIONAL WEEK

It may sound trite that "health is better than wealth," but it is as true as gospel. Where is the profit of wrecking health to acquire a competency and then, in pain and distress spend it all on hospitals and hot springs?

That question should become personal to every sensible person in Atlanta and Georgia during the first week in May. During that declared "Health Education Week" the Medical Association of Georgia, in co-operation with the medical school of Emory University, the medical department of the University of Georgia, the Anti-Tuberculosis Association, the state board of health and other interested groups, plan an intensive course of lectures and demonstrations throughout the state. The plans contemplate the use of all available organizations such as schools, civic clubs, parent-teacher organizations, etc., in putting the campaign over and particularly proposes that leaders in various communities of our state co-operate with their medical men in carrying the message to the people.

With the wonderful advances made in this generation in medical science, disease prevention, personal and civic hygiene promotion, Georgia should figure as one of the most healthful regions on the continent. Her climatic, food and physical exercise resources combine to make that possible, if the people will themselves be amenable to scientific instruction and practice.

The forthcoming "Health Education Week" invites the serious co-operation of all who know the value of health, and especially the parents of the growing children in their homes. They should avail themselves of the expert knowledge that will be freely offered to them in that week.

And while white citizens are safe-guarding their health interests they should not forget how much those conditions are menaced by the increasing disease afflictions of the colored people who serve them in so many intimate capacities. Their servants, living in unsanitary conditions, both physical and moral, become perilous disease carriers.

This health week should produce most profitable results to the general physical welfare.—*Editorial Atlanta Constitution, Atlanta, Ga., April 14, 1930.*

## COUNTIES AND CHAIRMEN

Barrow—W. L. Mathews, Winder.  
 Bartow—H. C. Pearson, Cartersville.  
 Bibb—R. C. Goolsby, Macon.  
 Ben Hill—L. S. Osborne, Fitzgerald.  
 Burke—Wm. R. Lowe, Midville.  
 Calhoun—C. K. Sharp, Arlington.  
 Campbell—W. R. Camp, Fairburn.  
 Carroll—D. S. Reese, Carrollton.  
 Chatham—Wm. H. Myers, Savannah.  
 Chattooga—H. D. Brown, Summerville.  
 Cherokee—Grady N. Coker, Canton.  
 Clarke—T. H. Johnston, Athens.  
 Clay—W. O. Shepard, Bluffton.  
 Clayton—H. D. Kemper, Swainsboro.  
 Cobb—L. L. Welch, Marietta.  
 Coffee—J. W. Wallace, Douglas.  
 Colquitt—T. H. Chestnutt, Moultrie.  
 Cook—W. M. Shepard, Adel.  
 Crisp—J. N. Dorminy, Cordele.  
 Decatur—E. C. Smith, Donalsonville.  
 DeKalb—J. R. Evans, Decatur.  
 Dougherty—I. M. Lucas, Albany.  
 Early—J. G. Sandifer, Blakely.  
 Elbert—A. C. Smith, Elberton.  
 Emanuel—R. C. Franklin, Swainsboro.  
 Evans—S. T. Ellis, Claxton.  
 Fannin—C. B. Crawford, Blue Ridge.  
 Fayette—T. J. Busey, Fayetteville.  
 Floyd—M. M. McCord and E. J. Radcliffe, Rome.  
 Forsyth—J. A. Otwell, Cumming.  
 Fulton—C. W. Roberts, Atlanta.  
 Glynn—J. W. Simmons, Brunswick.  
 Gordon—Z. V. Johnston, Calhoun.  
 Grady—J. V. Rogers, Cairo.  
 Gwinnett—J. C. Orr, Buford.  
 Hancock—C. S. Jernigan, Sparta.  
 Hart—B. C. Teasley, Hartwell.  
 Houston—J. H. Riley, Perry.  
 Jackson—J. C. Bennett, Jefferson.  
 Jasper—E. M. Lancaster, Shady Dale.  
 Jefferson—S. T. R. Revell, Louisville.  
 Jenkins—C. Thompson, Millen.  
 Johnson—H. B. Bray, Wrightsville.  
 Lamar—J. M. Rogers, Barnesville.  
 Laurens—O. H. Cheek, Dublin.  
 Lowndes—B. G. Owens, Valdosta.  
 Macon—C. P. Savage, Montezuma.  
 Miller—W. C. Hays, Colquitt.  
 Monroe—J. O. Elrod, Forsyth.  
 Morgan—D. M. Carter, Madison.  
 Montgomery—J. E. Hunt, Mt. Vernon.  
 Murray—E. H. Dickie, Chatsworth.  
 Muscogee—H. J. Bickerstaff, Columbus.  
 Pike—M. M. Head, Zeblon.  
 Polk—W. G. England, Cedartown.  
 Rabun—J. C. Dover, Clayton.  
 Randolph—G. Y. Moore, Cuthbert.  
 Richmond—C. M. Burpee, Augusta.  
 Screven—H. W. Doster, Rocky Ford.

Spalding—W. C. Humphries, Griffin.  
 Stephens—C. L. Ayers, Toccoa.  
 Stewart-Webster—J. M. Kenyon, Richland.  
 Sumter-Lee—H. M. Tolleson, Smithville.  
 Tattnall—L. V. Strickland, Cobbstown.  
 Taylor—W. W. Edwards, Butler.  
 Telfair—C. J. Maloy, Helena.  
 Terrell—S. P. Kenyon, Dawson.  
 Thomas—Arthur D. Little, Thomasville.  
 Turner—J. H. Baxter, Ashburn.  
 Walker—J. H. Hammond, LaFayette.  
 Ware—W. L. Pomeroy, Waycross.  
 Washington—B. L. Helton, Sandersville.  
 Wayne—A. J. Gordon, Jesup.  
 Wilkes—H. T. Harris, Washington.  
 Whitfield—E. O. Shellhouse, Dalton.  
 Worth—G. S. Summer, Poulen.

The Dental Association of Fulton County has appointed the following to act as chairmen of their respective committees during Health Education Week:

Radio Talks—Dr. J. G. Williams.  
 Round-up Meetings—Dr. C. N. Hughes.  
 Civic Clubs—Dr. Paul W. Key.  
 Addresses at Churches—Dr. B. T. Carter.  
 Movie Films—Dr. Harl L. Parks.  
 Chapel Addresses—Dr. W. A. Garrett.  
 Fulton County Open House—Dr. F. A. Daniel.  
 Grand Mass Meeting—Dr. Thos. P. Hinman.  
 Speakers Bureau—Dr. K. R. Armstrong.  
 Campaign Fulton County—Dr. Jno. Eberhardt.  
 Campaign for Colored People—Dr. R. L. Dement.

## TULAREMIA

(Continued from Page 138)

he felt fairly well. He continues to have slight headaches, but has been working a little. A specimen of blood obtained on that date was reported strongly positive for tularemia.

This is the first and only case of tularemia I have seen or heard of in Randolph County and it seems to be rather mild.

## AUGUSTA COUNTRY CLUB

The Augusta Country Club maintains a modern, up-to-date Club House where luncheons, dinners, teas and banquets can be served with competent white chefs and a service that is equal of that of the larger cities of the country. A large spacious locker room with modern shower baths, lounge and every comfort is supplied for the guests.

There is also a modern and up-to-date Gun Club, which is considered one of the best in the country, where those who are interested can enjoy trap shooting. Regular shoots occur weekly. The country around Augusta is noted for fine quail shooting.

We extend you a cordial invitation to visit Augusta where you can avail yourself of the privileges of the Augusta Country Club and everything will be done to make your stay enjoyable.



## MEDICAL ASSOCIATION OF GEORGIA

EIGHTY-FIRST ANNUAL SESSION

AUGUSTA

PARTRIDGE INN HEADQUARTERS

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Alternate, Wm. A. Mulherin .....	Augusta
E. C. Thrash (1929-30) .....	Atlanta
Alternate, C. W. Roberts .....	Atlanta
O. H. Weaver (1930-1) .....	Macon

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Wm. R. Dancy, President	Savannah
A. H. Bunce, Secretary-Treasurer	Atlanta

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Baldwin	U. S. Bowen, Milledgeville
Barrow	E. R. Harris, Winder
Bartow	T. Lowry, Cartersville
Ben Hill	D. B. Ware, Fitzgerald
Bibb	Wallace Bazemore, Macon
	F. L. Webb, Macon
Blue Ridge	C. B. Crawford, Blue Ridge
Brooks	
Bulloch-Candler	R. L. Kennedy, Metter
Burke	H. F. Bent, Midville
Butts	A. F. White, Flovilla
Carroll	
Campbell	R. T. Camp, Fairburn
Chatham	R. V. Martin, Savannah
	G. H. Lang, Savannah
Chattooga	
Cherokee	D. H. Garrison, Tate
Clarke	P. L. Holliday, Athens
Clayton-Fayette	
Cobb	C. D. Elder, Marietta
Colquit	H. T. Edmondson, Moultrie
Coffee	D. H. Meeks, Nicholls
Cook	
Coweta	
Crisp	
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DeKalb	
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Dougherty	J. P. Tye, Albany
Douglas	
Elbert	D. N. Thompson, Elberton
Emanuel	D. D. Smith, Swainsboro
Evans	
Floyd	A. F. Routledge, Rome
Forsyth	
Franklin	Stewart D. Brown, Royston
Fulton	
Glynn	
Gordon	
Grady	A. B. Reynolds, Cairo
Greene	

Gwinnett	W. T. Hinton, Dacula
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Mitchell	
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Newton	
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	W. R. Houston, Augusta
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Spalding	A. H. Frye, Griffin
Stephens	J. H. Terrell, Toccoa
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Sumter	J. F. Lunsford, Preston
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Tift	
Toombs	
Tri-	C. R. Barksdale, Blakely
	(Calhoun, Early, and Miller)
Tri	
	(Liberty, Long and McIntosh)
Troup	Frank J. Amis, Hogansville
Turner	H. M. Belflower, Sycamore
Upson	J. M. McKinzie, Thomaston
Walker	M. W. Spearman, Chickamauga
Walton	
Ware	D. M. Bradley, Waycross
Warren	A. W. Davis, Warrenton
Washington	E. S. Peacock, Harrison
Wayne	
Whitfield	J. H. Steed, Dalton

Wilkes	H. T. Harriss, Washington
Worth	E. D. Ford, Doles

\*This list includes the names of all delegates which have been reported to the Secretary Treasurer. Others will be included in the official program, if reported at once.

#### FRATERNAL DELEGATES TO OTHER STATE MEETINGS

To visit Alabama: R. F. Wheat, Bainbridge; C. K. Sharp, Arlington.

To visit Florida: W. F. Reavis, Waycross; G. Y. Moore, Cuthbert.

To visit North Carolina: Hal M. Davison, Atlanta; C. D. Whelchel, Gainesville.

To visit South Carolina: Chas. C. Harrold, Macon; Wm. Shearouse, Savannah.

To visit Tennessee: Marion T. Benson, Atlanta; Linton Gerdine, Athens.

To visit Kentucky: Frank K. Boland, Atlanta.

#### ANNOUNCEMENTS

Meetings will be held in the Palm Room of Partridge Inn.

Be sure to go to the Registration Desk, present your 1930 card and procure a badge immediately on your arrival.

Discussion of papers is open to all members and guests of the Association. It is not limited to those named on the program.

On arising to discuss a paper the speaker will please announce his name and address clearly for the benefit of the Association and stenographer.

Meetings will be called to order at the hour fixed on the program. It is especially desired that the members be prompt in their attendance.

All manuscripts should be typewritten, double spaced and on one side of the paper only. Papers must be handed to the Secretary immediately after being read.

#### IMPORTANT NOTICE

Delegates must present written credentials to the Committee on Credentials from the House of Delegates to secure Delegates' Badge.

#### PUBLIC MEETINGS

WEDNESDAY, MAY 14, 10:00 A. M.  
OPENING MEETING

WEDNESDAY, MAY 14, 8:30 P. M.

This meeting has been arranged specially for the public and will be held in the Palm Room of the Partridge Inn. Invite your friends to come with you.

Presentation of the "Badge of Service" to the President, William R. Dancy, by Eugene E. Murphey.

THURSDAY, MAY 15, 12 NOON  
PRESIDENT'S ADDRESS

The President's address will be at an open session to which the public and visitors are invited.



## ENTERTAINMENTS

## TUESDAY, MAY 13, 9 to 12 P. M.

Informal reception and dance in Palm Room at Partridge Inn for members of the Association and Woman's Auxiliary.

## WEDNESDAY, MAY 14, 6:30 P. M.

Annual dinner of the alumni of the University of Georgia Medical Department, Partridge Inn.

Annual dinner of the alumni of Emory University School of Medicine, Partridge Inn.

Get tickets at registration desk.

## WEDNESDAY, MAY 14

10 to 12 P. M.

One act skit by the Little Theater League of Augusta followed by dance for members of the Association and Auxiliary.

## THURSDAY, MAY 15

7 to 10 P. M.

Banquet at Partridge Inn.

Eugene E. Murphey—Toastmaster.

10 P. M. to 1 A. M.

Dance at Country Club.

## GOLF COURSES

The golf courses at the Gun Club, Forrest Ricker Hotel and Municipal Links will be open to members of the Association on Tuesday, Wednesday and Thursday. (May 13, 14, 15).

## TRAP SHOOTING

Trap shooting at the Augusta Country Club, Tuesday, Wednesday and Thursday. (May 13, 14, 15).

## MEETING OF THE COUNCIL

The first meeting of the Council will be held in the Sun Parlor, Partridge Inn, May 13, at 6:00 P. M. Each Councilor will render a written report of conditions in each county of his district. Other meetings of the Council will be held on the call of the Chairman.

## MEETINGS OF THE HOUSE OF DELEGATES

PALM ROOM, PARTRIDGE INN

TUESDAY, MAY 13, 3:00 P. M.

First meeting of the House of Delegates.

1. Call to order by the President.

2. Roll Call.

3. Report of Officers:

President.

President-Elect.

Vice-Presidents.

Parliamentarian.

Secretary-Treasurer.

4. Report of Council by the Chairman.

5. Report of Committees:

a. Scientific Work.

b. Public Policy and Legislation.

c. Arrangements.

d. Medical Defense.

e. Hospitals.

f. Georgia State Nurses' Association.

g. Necrology.

h. Cancer Commission.

i. History.

j. Abner Wellborn Calboun Lectureship.

k. Crawford W. Long Memorial Prize.

l. Advisory Committee—Woman's Auxiliary.

m. Special Committees.

6. Report of Delegates to the A. M. A.

7. Report of Fraternal Delegates.

8. Unfinished business.

9. New business.

## THURSDAY, MAY 15, 8:00 A. M.

Second meeting of the House of Delegates.

1. Call to order by the President.

2. Reading of minutes.

3. Report of committees.

4. Unfinished business.

5. New business.

## PROGRAM

The papers for each meeting must be read as scheduled on the program.

## WEDNESDAY, MAY 14, 1930

PALM ROOM, PARTRIDGE INN

10:00 A. M.

Call to order by the President, William R. Dancy, Savannah.

## INVOCATION

Rev. Edgar C. Lucas ..... Augusta  
Pastor of First Christian Church

## ADDRESS OF WELCOME

George A. Traylor ..... Augusta

## RESPONSE TO ADDRESS OF WELCOME

M. A. Clark ..... Macon

## SCIENTIFIC PAPERS

*Symposium on Malaria*

1. Plasmochin in the Treatment of Malaria  
R. L. Miller, Waynesboro.

2. Malaria Control  
J. A. Redfearn, Albany.  
Thos. H. Griffiths, Albany.

3. The Treatment of Hemoglobinuric Fever—  
Case Report

H. M. Tolleson, Smithville.

To lead the discussion of Nos. 1, 2, 3:

Ernest F. Wahl, Thomasville.

T. F. Abercrombie, Atlanta.

S. H. Haddock, Millen.

4. Blood Chemistry and Internal Medicine—Its Aid  
in Diagnosis, Prognosis and Treatment

T. L. Byrd, Atlanta.

To lead the discussion:

Jno. W. Daniel, Savannah.

Jas. A. McGarity, Atlanta.

5. Acute Poliomyelitis

Harold I. Reynolds, Athens.

To lead the discussion:

Chas. C. Hinton, Macon.

Lewis M. Gaines, Atlanta.

Abner Wellborn Calhoun Lecture

GOITER

Frank Howard Lahey, Boston, Massachusetts.

WEDNESDAY, MAY 14, 2:30 P. M.

CLINICS

6. Mastoidectomy—Blood Clot Closure

T. E. Oertel, Augusta.

7. A Disorder of Constitution

Wm. R. Houston, Augusta.

8. Essentials of Infant Feeding—A Case of Argyria

Wm. A. Mulherin, Augusta.

9. Acute Osteomyelitis—Orr's Treatment.

Chas. W. Crane, Augusta.

10. Forceps Operations

A. J. Kilpatrick, Augusta.

11. X-Ray Diagnosis

L. P. Holmes, Augusta.

12. Dermatological Cases

G. T. Bernard, Augusta.

WEDNESDAY, MAY 14, 8:30 P. M.

PUBLIC MEETING

Educational meeting by invited guests. Titles of lectures and names of guests will appear in official program.

Presentation of the "Badge of Service" to the President, William R. Dancy by Eugene E. Murphey.

THURSDAY, MAY 15, 9 A. M.

13. The Care of Eye Injuries from the Practitioner's Standpoint

Wm. O. Martin, Jr., Atlanta.

To lead the discussion:

B. H. Minchew, Waycross.

I. W. Irvin, Albany.

14. Vaso-Motor Rhinitis

A. G. Fort, Atlanta.

To lead the discussion:

Geo. H. Lang, Savannah.

Dunbar Roy, Atlanta.

15. Keratosis, Epithelioma or Skin Cancer

J. G. Dean, Dawson.

To lead the discussion:

Howard Hailey, Atlanta.

Jack W. Jones, Atlanta.

16. Spinal Anesthesia

R. M. Harbin, Jr., Rome.

To lead the discussion:

A. A. Morrison, Savannah.

Geo. W. Fuller, Atlanta.

17. Laws Governing the Healing Art in Georgia

J. O. Elrod, Forsyth.

To lead the discussion:

Chas. L. Ridley, Macon.

C. L. Ayers, Toccoa.

THURSDAY, MAY 15, NOON

*President's Address*

William R. Dancy, Savannah.

THURSDAY, MAY 15, 2:30 P. M.

*Symposium on Diseases of Children*

18. Health Habits for Children

M. M. McCord, Rome.

19. A Critical Period of Childhood

Thos. Bolling Gay, Atlanta.

20. Alimentary Anemia

Wm. Willis Anderson, Atlanta.

To lead the discussion of Nos. 18, 19, 20.

Linton, Gerdine, Athens.

Frank P. Norman, Columbus.

A. J. Waring, Savannah.

21. Chronic Cystic Mastitis

Chas. C. Harrold, Macon.

To lead the discussion:

Wm. H. Myers, Savannah.

J. L. Campbell, Atlanta.

22. Surgical Treatment of Gastric and Duodenal Ulcer with Respect to the Pathology Demonstrated

Lon W. Grove, Atlanta.

To lead the discussion:

J. C. Patterson, Cuthbert.

E. H. Greene, Atlanta.

23. Supra-Public Prostatectomy

Ernest Corn, Macon.

L. W. Pierce, Macon.

To lead the discussion:

Earl H. Floyd, Atlanta.

E. G. Ballenger, Atlanta.

24. Diverticula of the Esophagus—Pulsion Type—Case Report

H. H. McGee, Savannah.

To lead the discussion:

Murdock Eguen, Atlanta.

Robert Drane, Savannah.

FRIDAY, MAY 16, 9:00 A. M.

25. Carcinoma of the Ureter

John B. Cross, Atlanta.

To lead the discussion:

W. F. Reavis, Waycross.

Walter R. Holmes, Atlanta.

26. Accidental Separation of the Normally Implanted Placenta

E. Carson Demmond, Savannah.

To lead the discussion:

Jas. R. McCord, Atlanta.

M. A. Clark, Macon.

27. Some Unusual Problems in Surgery of the Thyroid

Chas. E. Waits, Atlanta.

To lead the discussion:

Julian Quattelbaum, Savannah.

Frank K. Boland, Atlanta.

28. Endemic Typhus

S. T. R. Revell, Louisville.

To lead the discussion:

Ralston Lattimore, Savannah.

M. B. Allen, Hoschton.

29. Tularemia

S. E. Sanchez, Barwick.

To lead the discussion:

E. C. Thrash, Atlanta.

A. J. Mooney, Statesboro.

FRIDAY, MAY 16, 2:30 P. M.

30. The Value of the Electrocardiograph to the General Clinician

Jas. A. Fountain, Macon.

To lead the discussion:

J. Geo. Bachmann, Emory University.

T. E. Rogers, Macon.

31. Rabies

Jack C. Norris, Decatur.

To lead the discussion:

Richard V. Lamar, Augusta.

T. J. McArthur, Cordele.

32. Pulmonary Spirochetosis

H. L. Levington, Savannah.

To lead the discussion:

Edson W. Glidden, Alto.

Glenville Giddings, Atlanta.

### ALTERNATES

1. Nephrosis

L. Minor Blackford, Atlanta.

2. Breast Cancer

A. J. Ayers and W. F. Lake, Atlanta.

3. Angina Pectoris

Chas. C. Hinton, Macon.

### ELECTION OF OFFICERS

President-Elect.

First Vice-President.

Second Vice-President.

Two Delegates to the A. M. A.

Three Alternate Delegates to the A. M. A.

Secretary-Treasurer.

Councilors for the First, Second, Third and Fourth Districts.

Selection of meeting place for 1931.

### CONSTITUTION AND BY-LAWS

Chapter II, Section 2. No papers or addresses before the Association, except those of the President and invited essayists, shall occupy more than fifteen minutes in their delivery; and no member shall speak longer than five minutes, nor more than once on any subject, provided that each essayist shall have five minutes in which to close the discussion of his paper.

Chapter VIII, Section 1. The deliberations of this

Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

Chapter VIII, Section 2. All papers read before the Association shall become its property. Each paper shall be deposited with the Secretary when read, and if this is not done, it shall not be published.

No miscellaneous or business matters will be discussed before the scientific session, but will be referred to the House of Delegates.

### Resolution Adopted 1921

Resolved, That a member who sends in a title of a paper to be placed on the program and is not present to read the paper shall pay the penalty of not having an opportunity to appear on the program for two years, unless he presents an excuse acceptable to the Committee on Scientific Work.

CHAS. H. RICHARDSON, JR., Chairman.

C. W. ROBERTS.

ALLEN H. BUNCE.

Committee On Scientific Work.

We are instructed by the President to announce to all essayists, that the sessions of the Scientific Program of the Association will begin on time, and that the above regulations of the By-Laws in reference to the program will be strictly enforced.

### IN MEMORIAM\*

Allen, Henry Dawson, Milledgeville, March 22, 1930.

Byrd, Harvey Otis, Atlanta, June 28, 1929.

Cheney, R. Lee, Shellman, May 21, 1929.

Coleman, Edward T., Graymont, September 18, 1929.

Craig, Newton, Atlanta, August 4, 1929.

Davis, William Lewis, Albany, November 11, 1929.

Head, J. M., Zebulon, April 9, 1930.

Hinton, Chalmers, Lawrenceville, December 19, 1929.

Holcombe, Thomas Lorenzo, Jefferson, April 11, 1929.

Johnson, Benjamin F., Garfield, June 29, 1929.

Kinard, Joseph O., Atlanta, December 31, 1929.

Ricketson, George W., Broxton, September 22, 1929.

Russell, Edward A., Fitzgerald, October 18, 1929.

Spears, Thomas Alphonsus, Atlanta, June 15, 1929.

Spivey, Oscar Smith, Macon, October 19, 1929.

Temples, Andrew, Statesboro, June 17, 1929.

Tye, Clarence Oscar, Edison, February 7, 1930.

Usher, Sheddie, Savannah, September 2, 1929.

Walker, John L., Waycross, May 14, 1929.

White, John Bonar, Atlanta, January 23, 1930.

\*This is the list of members who have died since our last annual session as it appears on our records. Please notify the Secretary-Treasurer of any errors or omissions.



## COMMERCIAL EXHIBITS

1. Mead Johnson & Company, Evansville, Ind.  
Infant diet materials.
2. The C. V. Mosby Company, St. Louis, Mo.  
Publishers of Medical Books and Literature.
3. W. B. Saunders Company, Philadelphia, Pa.  
Publishers of Medical Books and Literature.
4. Surgical Selling Company, Atlanta, Ga.  
Surgical Instruments, Hospital Furniture and  
Sterilizers, Anesthesia and Suction Apparatus,  
nitrous oxide, Oxygen and Ethylene Gas.
5. Max Woche Son Company, Cincinnati, Ohio.  
Surgical Instruments, Hospital and Physicians'  
Supplies.
6. The S. & H. X-Ray Company, Atlanta, Ga.  
Keleket X-Ray and Diathermy Units, Hanovia  
Alpine Sun Lamps, Accessories and Supplies.
7. Borden Sales Company, New York, N. Y.  
Food for Infants.
8. Horlick's Malted Milk Corporation, Racine, Wis.  
Horlick's Food for Infants and Invalids, Malted  
Milk Lunch Tablets, and Horlick's Diastoid.
9. Hanovia Chemical & Manufacturing Co., New-  
ark, N. J.  
Alpine Sun and Kromayer Lamps.
11. Deshell Laboratories, Inc., Chicago, Ill.  
Petrolagar.
12. Harrower Laboratory, Inc., Glendale, Calif.  
Endocrine Products.
13. A. S. Aloe Company, St. Louis, Mo.  
Physiotherapy Equipment, Hospital Supplies  
and Orthopedic Apparatus.
- 14-15. Estes Surgical Supply Company, Atlanta,  
Georgia.  
Surgical Instruments, Physicians and Hospital  
Supplies, Drugs, Chemicals and Laboratory  
Equipment.
16. General Electric X-Ray Corporation, Chicago,  
Illinois.  
X-Ray Machines, Lamps and Tables for Phy-  
sicians and Hospitals, Ultra-Violet Lamps.

## CONSTITUTION AND BY-LAWS OF THE MEDICAL ASSOCIATION OF GEORGIA

### Constitution

## ARTICLE I.—NAME OF THE ASSOCIATION.

The name and title of this organization shall be the Medical Association of Georgia.

## ARTICLE II.—PURPOSES OF THE ASSOCIATION

The purpose of this Association shall be to federate and bring into one compact organization the entire medical profession of the State of Georgia; to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to guard and foster the material interests of its members and to protect them against imposition; and to enlighten and direct public opinion in regard to the great problems of state and medicine, so that the profession shall become more capable and honorable within itself, and more useful to the public, in the prevention and cure of disease, and in prolonging and adding comfort to life.

## ARTICLE III.—COMPONENT SOCIETIES

Competent societies shall consist of those county societies which hold charters from this Association.

## ARTICLE IV.—COMPOSITION OF THE ASSOCIATION

Section 1. This Association shall consist of members and delegates.

Sec. 2. Members: The members of this Association shall be the members of the component county medical societies to which only white physicians shall be eligible.

Sec. 3. Delegates: Delegates shall be those members who are elected in accordance with this constitution and by-laws to represent their respective component societies in the House of Delegates of this Association.

## ARTICLE V.—HOUSE OF DELEGATES

The House of Delegates shall be the legislative body of the Association, and shall consist of: (1) delegates elected by the component county societies; (2) the officers of the Association enumerated in Section 1 of Article IX of the Constitution; (3) ex-presidents and delegates to the American Medical Association.

## ARTICLE VI.—COUNCIL

The Council shall be the Board of Trustees and Finance Committee of the Association. The Council shall have full authority and power of the House of Delegates between annual sessions, unless the House of Delegates be called into session as provided in the Constitution and By-Laws.

It shall consist of the Councilors, the President, the President-Elect and the Secretary-Treasurer of the Association. Five of its members shall constitute a quorum.

## ARTICLE VII.—SESSIONS AND MEETINGS

Section 1. The annual sessions shall take place on the second Wednesday in May at such place as shall be designated by the Association, provided that in case

of conflict with the meeting of the American Medical Association the Council may change the date by publishing a notice in the Journal of the Medical Association of Georgia three months before the session.

Sec. 2. Special meetings of either the Association or the House of Delegates may be called by a two-thirds vote of the Council, or upon the petition of twenty delegates.

#### ARTICLE VIII.—SECTIONS AND DISTRICT SOCIETIES

Section 1. The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections, and for the organization of such Councilor district societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies.

#### ARTICLE IX.—OFFICERS

Section 1. The officers of this Association shall be a President, President-Elect, two Vice-Presidents, a Secretary-Treasurer, a Parliamentarian, and twelve Councilors, one from each congressional district of the state.

Sec. 2. The officers, except the Secretary-Treasurer, Parliamentarian and Councilors, shall be elected annually, provided that after the annual meeting of 1928 a President-Elect and not a President shall be elected annually. The President-Elect shall assume his office as President immediately after the next annual meeting following his election. The terms of the Councilors shall be for three years, as may be arranged, viz: the councilors from the first, second, third and fourth districts for three years; those for the fifth, sixth, seventh and eighth districts for two years; those for the ninth, tenth and eleventh districts for one year (1905); councilor from the twelfth district to be elected with the ninth, tenth and eleventh for the full term of three years. The secretary-treasurer shall be elected for a term of five years, and the parliamentarian for a term of three years. All these officers shall serve until their successors are elected and installed.

Sec. 3. The officers of this Association shall be elected by ballot, and without nomination, at 12 o'clock noon, on the third day of the annual session. The Councilors shall be elected at the same time, but on nomination by their respective District Societies at the annual meeting of such Societies preceding the meeting of the Association at which the vacancy occurs. If there is no election on the first ballot, the three names receiving the highest number of ballots shall be voted on, the other names being dropped. If there is no election on the second ballot, the two names receiving the highest number of ballots shall be voted on until an election occurs. Delegates to the American Medical Association shall be elected at the same time and in the same manner.

#### ARTICLE X.—FUNDS AND EXPENSES

Funds shall be raised by an equal per capita assessment on each component society. The amount of the assessment shall not exceed the sum of \$10.00 per capita per annum. Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publications, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must be approved by the Finance Committee before action is taken thereon. (Amended, May, 1929, page 482.)

#### ARTICLE XI.—RATIFICATION

The House of Delegates shall submit all questions before it to the Association for ratification.

#### ARTICLE XII.—THE SEAL

The Association shall have a common seal, with power to break, change or renew the same at pleasure.

#### ARTICLE XIII.—AMENDMENTS

Any amendment that may be offered to the Constitution shall lie over until the next annual session; and for its adoption at such session shall require a two-thirds vote of all present and voting.

### By-Laws

#### CHAPTER I.—MEMBERSHIP

Section 1. The name of a physician on the properly certified roster of members of a component society, which has paid its annual assessment, shall be *prima facie* evidence of membership in this Association.

Sec. 2. Any person who is under sentence of suspension or expulsion from a component society or whose name has been dropped from its roll of members, shall not be entitled to any of the rights or benefits of this Association, nor shall he be permitted to take part in any of its proceedings until he has been relieved of such disability.

Sec. 3. Each member in attendance at the annual session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section.

Sec. 4. Any member for old age, length of service, or other good reasons, may upon recommendation of the Board of Censors, be elected to honorary membership of his county society without dues. Such member shall be enrolled as an honorary member of his county society and the Association, and shall be entitled to all the privileges of the Association.

#### CHAPTER II.—GENERAL MEETINGS

Sec. 1. All registered members may attend and participate in the proceedings and discussions of the gen-

eral meetings. Visitors duly accredited to represent the Association of other states, or of the District of Columbia, not exceeding two in number for each organization, may attend upon, and participate in the discussion of the general meetings, but shall not have a vote. Such delegates may read papers upon invitation of the Committee on Scientific Work. The general meetings shall be presided over by the President or by one of the Vice-Presidents.

Sec. 2. No papers or addresses before the Association, except those of the President and invited essayists, shall occupy more than fifteen minutes in their delivery; and no member shall speak longer than five minutes, nor more than once on any subject, provided that each essayist shall have five minutes in which to close the discussion of his paper.

Sec. 3. Entertainments. Any social entertainment which may be given by this Association shall be confined to the evening of the second day.

Sec. 4. Guests. Any physician not a resident of this state but a member of his state association, or any distinguished scientist not a physician, may be counted a guest during any annual session on invitation of the President, and shall be accorded the privilege of participating in the scientific work of that session.

### CHAPTER III.—HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet on the day preceding the first day of the annual session, the time to be fixed by the Committee on Scientific Work. It may adjourn from time to time as may be necessary to complete its business; provided that its hours shall conflict as little as possible with the general meetings. The order of business shall be arranged as a separate section of the program.

Sec. 2. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members, and one for each fraction thereof, but each component society which has made its annual report and paid its assessment as provided in this Constitution and By-Laws shall be entitled to one delegate. Should the regular delegate from any county not be present at the meeting, the President shall appoint a substitute from that county to act.

Sec. 3. Twenty delegates present shall constitute a quorum.

Sec. 4. It shall through its officers, council and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each annual session a stepping-stone to future ones of higher interest.

Sec. 5. It shall consider and advise as to the material interest of the profession, and of the public in those important matters wherein it is dependent on the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse popular information in relation thereto.

Sec. 6. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interests in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until if possible every physician in every county of the State has been brought under medical society influence.

Sec. 7. It shall encourage post-graduate and research work as well as home study, and shall endeavor to have the results utilized, and intelligently discussed in the county societies.

Sec. 8. It shall divide the State into councilor districts, one for each congressional district, and when the best interests of the Association and profession will be promoted thereby, organize in each a district medical society, and all members of component county societies and no others shall be members in such district societies.

Sec. 9. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates. Such committees shall report to the House of Delegates and may be present and participate in the debate thereon.

### CHAPTER IV.—DUTIES OF OFFICERS

Section 1. The President shall preside at all meetings of the Association and of the House of Delegates; shall appoint all committees not otherwise provided for, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the State during his term of office, and as far as practicable, shall visit, by appointment, the various sections of the State and assist the Councilors in building up the county societies, and in making their work more practical and useful.

Sec. 2. The Vice-President shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Vice-Presidents, in their order, shall succeed him.

In order to give him a better opportunity of becoming better acquainted with his duties and with the needs of the Association, the President shall be elected one year prior to taking office. During this time he shall be known as President-Elect.

Sec. 3. The Secretary-Treasurer shall give bond in the sum of One Thousand Dollars. He shall demand and receive all funds due the Association, together with the bequests and donations.

Sec. 4. The Secretary-Treasurer shall attend the general meetings of the Association and the meetings of the House of Delegates, and shall keep the minutes of their respective proceedings in separate record books. He shall be ex-officio Secretary of the



Council. He shall be custodian of all record-books and papers belonging to the Association. He shall provide for the registration of the members, delegates and accredited visitors at the annual session. He shall with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society, and on request transmit a copy of this list to the American Medical Association. He shall aid the Councilors in the organization and improvement of the county societies in the extension of the power and usefulness of this Association. He shall conduct the official correspondence, notifying members of meetings, officers of their election, and committees of their appointment and duties. He shall employ such assistants as may be ordered by the House of Delegates with the approval of the Association, and shall make an annual report to the Association. He shall supply each component society with the necessary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessment and collect the same. Acting with the committee on scientific work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Association. He shall be editor of the *Journal of the Medical Association of Georgia*. He shall employ such assistants as may be ordered by the Council or the House of Delegates. He shall annually make a report of his doings to the House of Delegates.

He shall furnish a balance sheet at each annual meeting for the past fiscal year to be published in the *Journal*. This shall consist of an itemized statement of all financial transactions of the past year, all accounts made, money received and from whom and all moneys disbursed, to whom, and for what purpose, with vouchers attached. A fiscal year includes the period of time between the first day of May and the last day of April.

#### CHAPTER V.—COUNCIL

Section 1. The Council shall meet on the day preceding the annual session and daily during the session, and at such other times as necessity may require, subject to the approval of the President. It shall meet on the last day of the annual session of the Association to organize and outline work for the ensuing year. It shall elect a chairman and clerk, who, in the absence of the Secretary of the Association, shall keep a record of its proceedings. It shall, through its chairman, make an annual report to the House of Delegates. It shall be the business body of the Association and attend to the business of the Association in the interim between meetings.

Sec. 2. Each Councilor shall be organizer and peacemaker for his district. He shall visit each county in his district at least once a year for the purpose of organizing component societies where none exist, for inquiring into the conditions of the profession, and for improving and increasing the zeal of the county

societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district at the annual session of the House of Delegates. The necessary traveling expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the House of Delegates on a properly itemized statement, but this shall not be construed to include his expense in attending the annual session of the Association. Each Councilor may appoint a Vice-Councilor to assist him in the performance of his duties in that district.

Sec. 3. The Council shall be the board of censors of the Association. It shall consider all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the general meeting shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of a component society, on which an appeal is taken from the decision of an individual Councilor, or to which attention has been called by the Councilor or interested members. It shall hear and decide all questions affecting unethical conduct on the part of any members at any annual session, and its decision in all such matters shall be final when ratified by the Association.

Sec. 4. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and these societies, when organized and chartered shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

Sec. 5. The Council shall provide for and superintend the publication and distribution of all proceedings, transactions and memoirs of the Association, and shall have authority to appoint such assistants to the editor as it deems necessary. It shall manage and conduct the *Journal of the Medical Association of Georgia*, which is the organ of the Association, and all money paid into the treasury as dues shall be received as subscriptions to the *Journal*.

All money received by the Council and its agents, resulting from the discharge of the duties assigned to them, must be paid to the Secretary-Treasurer of the Association. As the Finance Committee it shall annually audit the accounts of the Secretary-Treasurer and other agents of this Association, and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Association during the year, and the amount of all other property belonging to the Association under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the office

of the Secretary-Treasurer, the Council shall fill the vacancy until the next annual election.

Sec. 6. All reports on scientific subjects and all scientific discussions and papers heard before the Association, shall be referred to the Journal of the Medical Association of Georgia for publication. The editor, with the consent of the Councilor for the district in which he resides, may curtail or abstract papers or discussions, and the Council may return any paper to its author which it may not consider suitable for publication.

Sec. 7. All commercial sessions shall be within the control and direction of the Council.

Sec. 8. In the absence of a Councilor and Vice-Councilor the President is empowered to appoint a representative from the district as acting Councilor, who shall have full rights and power of a Councilor.

Sec. 9. Each Councilor shall render at every session a written report of each county in his district.

Sec. 10. Any member of the Council who fails to attend two regular successive sessions of the Council, or whose district does not show evidence of the performance of his duties during the year, unless he renders an acceptable excuse to the Council, is subject to have his position declared vacant by the President and a successor appointed by the President.

#### CHAPTER VI.—COMMITTEES

Section 1. The standing committee shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Arrangements.

A Committee on Medical Defense, and such other committees as may be necessary.

Sec. 2. The Committees on Scientific Work shall consist of three members of which the Secretary-Treasurer shall be one, and shall determine the character and scope of the scientific proceedings of the Association for each session. Thirty days previous to each annual session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented.

This By-Law shall not prohibit the Committee on Scientific Work from inviting not more than two distinguished members of the national organization to deliver addresses or read papers at any annual meeting.

Sec. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary, the Commissioner of Health of the State of Georgia, and a sub-committee of three members from each Councilor District appointed by the chairman when needed. It shall represent the Association in securing and enforcing legislation in the interest of public health and of scientific medicine. It shall keep in touch with professional and public opinion, shall endeavor to shape legislation so as to secure the best results for the whole people, and shall strive to organize professional influence so as to pro-

mote the general good of the community in local, state and national affairs and elections.

Sec. 4. The Committee on Arrangements shall be appointed by the component society in which the annual session is to be held. It shall provide suitable accommodations for the meeting places of the Association and of the House of Delegates and, of their respective committees, and shall have general charge of all arrangements. Its chairman shall report an outline of the arrangements to the Secretary-Treasurer for publication in the program, and shall make additional announcements during the session as occasion may require.

Sec. 5. The Committee on Medical Defense shall consist of five members, of whom the Chairman of the Council and the Secretary-Treasurer of the Association shall be members. The other members, one of whom shall act as Chairman of the Committee, shall be elected by the Council for a period of five years. Those elected at this meeting (April 19, 1916), shall serve one, three and five years, respectively.

It shall be the duty of the Committee on Medical defense to investigate and defend all damage suits against the Medical Association of Georgia; to investigate all claims of civil malpractice made against its members; to take full charge of such cases, which after investigation, they decide to be proper cases for defense; to defend all such cases in the courts of last resort and pay all costs of such defense. However, they shall not pay, or obligate the Medical Association of Georgia to pay any judgment rendered against any member upon the final determination of any case. They shall be empowered to contract with such agents or attorneys as they may deem necessary for the proper carrying out of this By-Law.

The assistance for defense, as herein provided, shall be available only to members of the Medical Association of Georgia in good standing. Any member who has not paid his annual dues by April 1st shall not be considered in good standing in the application of this By-Law.

Any member or members of the Association threatened with suit for civil malpractice shall immediately communicate with the Secretary of the Association and shall give full and complete information in reference to all the circumstances alleged in the complaint. The Secretary shall proceed immediately to investigate the circumstances reported and shall advise with the attorneys or agents employed by the Committee for this purpose. The member sued, or threatened with suit, shall be consulted and shall have the complete confidence of the Committee in all transactions connected with the investigation in question. The Committee shall have the authority to require of a constituent society or the president thereof, the appointment of a committee of investigation in any such case, and it may direct the committee so appointed to report to the Committee on Medical Defense and not to the society from which it was appointed.



The Committee on Medical Defense may also, at its discretion, arrange to prosecute illegal practitioners in the State of Georgia and assist in the enforcement of the Medical Practice Act of this State.

## CHAPTER VII.—COUNTY SOCIETIES

Section 1. All county societies now in affiliation with this Association, or those which may hereafter be organized in the State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall on application, receive a charter from and become a component part of this Association.

Sec. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charter shall be issued thereto.

Sec. 3. Charters shall be issued only on approval of the Council, and shall be signed by the President and Secretary of this Association. The Association shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

Sec. 4. Only one competent medical society shall be chartered in any county.

Sec. 5. Each county society shall judge of the qualifications of its own members, but as such societies are the only portals to this Association, every reputable and legally registered white physician who does not practice or claim to practice, nor lend his support to any exclusive system of medicine, shall be eligible to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

Sec. 6. No matter what the unethical conduct or discipline of the members of the county society may be, both plaintiff and defendant shall have the right to appeal to the Council whose decision shall be final when ratified by the Association.

Sec. 7. In hearing appeals the Council may admit oral or written evidence, as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 8. When a member in good standing in a component county society moves to another county in this state, he shall be given a written certificate of these facts by the secretary of his society, without cost, for transmission to the secretary of the society in the county to which he moves. Such member shall be considered to be in good standing from the county society from which he was certified and in the Medical Association of Georgia to the end of the period for which his dues have been paid. (Amended, May, 1929, page 476-7)

Sec. 9. A physician living on or near a county

line may hold his membership in that county most convenient for him to attend, on permission of the component society in whose jurisdiction he resides.

Sec. 10. Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and material condition of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Sec. 11. At some meeting in advance of the annual session of this Association, each county society shall elect a delegate or delegates to represent it in the House of Delegates of this Association, in the proportion of one delegate to each fifty members, or fraction thereof, and the Secretary of the society shall send a list of such delegates to the Secretary of this Association at least ten days before the annual session.

Sec. 12. The Secretary of each component society shall keep a roster of its members, and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

Sec. 13. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates, and lists of non-affiliated physicians of the county, to the Secretary of this Association each year, thirty days before the annual session.

Sec. 14. Any county society which fails to pay its assessment, or make the report required, on or before April 1 of each year, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association, or of the House of Delegates, until such requirement has been met.

Sec. 15. The Secretary of each county society shall report to the Journal of the Medical Association of Georgia full minutes of each meeting and forward to it all scientific papers and discussions which the society shall consider worthy of publication.

## CHAPTER VIII.—RULES AND ETHICS

Section 1. The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

Sec. 2. All papers read before the Association shall become its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

Sec. 3. The principles of medical ethics of the  
(Continued on Page 173)



## WOMAN'S AUXILIARY

### MEDICAL ASSOCIATION OF GEORGIA

#### OFFICERS

President—Mrs. Marion T. Benson, Atlanta.  
 President-elect—Mrs. Chas. C. Harrold, Macon.  
 1st Vice-President—Mrs. J. A. Selden, Macon.  
 2nd Vice-President—Mrs. H. D. Allen, Sr.,  
 Milledgeville.  
 3rd Vice-President—Mrs. J. A. Redfearn, Albany.  
 Recording Secretary—Mrs. Lee Howard, Savannah.  
 Corresponding Secretary—Mrs. W. H. Garrison,  
 Clarkesville.

Treasurer—Mrs. Chas. E. Waits, Atlanta.  
 Parliamentarian—Mrs. J. E. Penland, Waycross.  
 Editor—Mrs. C. W. Roberts, Atlanta.

#### DELEGATES TO A. M. A. (1930)

Mrs. William R. Dancy, Savannah.  
 Mrs. C. C. Hinton, Macon.

#### DELEGATES TO S. M. A., MIAMI

Mrs. J. Cox Wall, Eastman.  
 Mrs. Ralston Lattimore, Savannah.

### INVITATION:

*To Members of Woman's Auxiliary:*

The Woman's Auxiliary to the Richmond County Medical Society extends a most cordial invitation to the Woman's Auxiliary to the Medical Association of Georgia to attend as its guest the sixth annual session of the Auxiliary to be held in Augusta, May 13, 14, 15, 16.

Partridge Inn, headquarters.

MRS. W. W. BATTEY, *President*,  
 Woman's Auxiliary to the Richmond  
 County Medical Society.

*To the Editor:*

Mulherin has asked me to let you know that the doctors' wives of Augusta have formed a Woman's Auxiliary and are perfecting plans for the entertainment of wives of the members at the forthcoming meeting in May.

We would be glad if you would run an item in the Journal making it plain that the wives of all members are invited and urged to come, and that the women here will try to insure for them a good time.

H. M. MICHEL, M. D.

Augusta, Ga., April 8, 1930.

### Entertainments

Tuesday P. M., May 13: Tea—Wilhenford Children's Hospital.

Wednesday P. M., May 14: Automobile ride to Louisville and reception at Jefferson Hotel from 3:00 to 5:00 p. m. Guests of Woman's Auxiliary of Jefferson County.

Thursday, 10:00 A. M. to 1:00 P. M., May 15: Bridge and golf at Country Club.

Thursday P. M., May 15: Visit to the picturesque gardens of Augusta followed by tea at the residence of Mrs. George Traylor.

### SIXTH ANNUAL SESSION

#### PARTRIDGE INN HEADQUARTERS

#### *Tentative Program*

The sixth annual session of the Woman's Auxiliary to the Medical Association of Georgia will be held at the Partridge Inn, Augusta, at the same time the eighty-first annual session of the association will be held.

The Partridge Inn will be headquarters for the entire program. Registration will begin on May 13 and the meetings will be held on May 14, 15, 16.

*Wednesday, May 14, 10:30 A. M.*

Meeting of Executive Committee and Delegates at Partridge Inn.

Report of Committee on Credentials, by Mrs. Lee Howard, Chairman, Savannah.

Address by Dr. William R. Dancy, President of the Medical Association of Georgia. "The Educational Fund."

Report of District Managers.

Appointment of Sessions Committee by the President.

Calendar Resolutions.

*Thursday, May 15, 10:30 A. M.*

General meeting at Partridge Inn.

Invocation.

Address of Welcome.

Response to Address of Welcome.

Greetings of the Woman's Auxiliary to the Southern Medical Association, by Mrs. James N. Brawner, President, Atlanta.

Greetings from the President of the Woman's Auxiliary to the Medical Association of Georgia, by Mrs. Marion T. Benson, Atlanta.

Introduction of Guests.

Address by Dr. G. Y. Moore, Cuthbert.

President-Elect of the Medical Association of Georgia.

#### *Order of Business*

1. Reading of minutes of last annual session.
2. Report of Treasurer.
3. Reports of other officers and chairmen of committees.
4. Reports from County Auxiliaries.
5. Report of President.
6. Election of Officers.

*Friday, May 16, 11:00 A. M.*

Meeting of new Executive Board.

#### *Special Notice*

A group picture will be made of all officers and past Presidents during the sixth annual session.

#### BALDWIN COUNTY AUXILIARY

The Woman's Auxiliary to the Baldwin County Medical Society submits the following report:

The Auxiliary has had a profitable as well as a pleasant year. The members have been faithful in attending the monthly meetings.

The president, Mrs. John W. Mobley, has been untiring in her efforts to make the meetings interesting.

The outstanding events of the year were: A lovely luncheon given to the members of the Tenth District Medical Society at its semi-annual meeting held in Milledgeville.

A colonial ball and pageant given for the benefit of thirty undernourished school children. The sum of \$57 was realized.

Donations to the Student Loan Fund and the Film Library.

Respectfully submitted,

MRS. R. C. SWINT, *Secretary*.

Milledgeville, Ga., April 5, 1930.

#### DELEGATES ELECTED

#### *Auxiliary to Georgia Medical Society Met This Morning*

The Auxiliary to the Georgia Medical Society met this morning at the home of Mrs. W. R. Dancy, with one of the largest attendances which has been present at a meeting in some time. Very gratifying reports were given by the standing committees, and Mrs. Ralston Lattimore, chairman of the committee, reported on the changes made in the constitution and by-laws, which will be voted on at the annual meeting. Mrs. William Shearouse, the First District president, gave the report on the district meeting held recently at Metter.

Mrs. Julian Quattlebaum and Mrs. H. H. McGee, Jr., were appointed as the delegates to attend the state convention to be held in Augusta May 14-16. Mrs. G. T. Olmstead and Mrs. Charles Usher are the alternates.

The auxiliary is interested in Health Education Week May 5-10 and will sponsor health films at the Lucas Theater and the Thirty-fifth Street Junior High School. Mrs. William Shearouse is the chairman for this work.

Announcement was made that the young student who has the medical scholarship from the State Auxiliary has made a better record than any of the other fifty-three students at Emory.

Mrs. Quattlebaum read a letter from the Savannah Welfare Society asking that the Auxiliary assist in starting a day nursery. It was decided to postpone action on this request.

At the close of the meeting Mrs. Dancy, with Mrs. John Daniel, the joint hostess, entertained the members at a social hour.—*Savannah Press*, April 5, 1930.

#### COMMUNICATIONS

*To the Editor:*

I have before me a picture of the most marvelous factory that ever existed—the Human Factory. I want to send you a copy.

It is a daring and dramatic showing of the functions of the human body in terms of machinery—a formidable array of pumps, pulleys, engines, filters, furnaces, wheels, etc., carrying on the work of the body.

This picture in full colors was reproduced in a recent issue of *HYGEIA*, The Health Magazine. I know of no better way to give these charts more publicity than to present them to men who are seriously concerned about the care of the Human Machine. So I am going to send one of these charts free to each physician who takes advantage of our "introductory offer" on *HYGEIA*.

*HYGEIA* performs a valuable service for physicians by bringing to waiting patients valuable, reliable information on the care of the "Human Factory." The kind of information every doctor would like personally to give his patients if time and opportunity permitted.

How to avoid a disease, what medical science can do for a disease once it has developed, the importance of consulting a physician at the first danger signal, how to regulate food and diet, how to exercise properly, how to recognize fake health schemes and quack practitioners of medicine. Sound health counsel that is reassuring to the layman and instills in him greater appreciation and confidence in the profession.

Once you know *HYGEIA*, I am confident you will be a regular subscriber. This special offer makes it

(Continued on Page 173)



Proposed Centennial Memorial Building

## AUGUSTA

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*Home of the Medical Department of the  
University of Georgia*

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The Medical Department of the University of Georgia, founded by Milton Antony in 1828, has occupied its present quarters since 1912. The old medical college building, with its huge Doric columns, still stands at the corner of Telfair and Sixth Streets, a monument to Dr. Antony, whose remains lie interred in front of it.

The medical college is now housed in a four-story brick structure, situated on the new campus, which covers about forty-five acres. On the same grounds are the University Hospital and the Wilhenford Children's Hospital.

The University Hospital, built by the city of Augusta in 1914 in immediate proximity to the college, was especially designed as a teaching hospital. Equipped, it cost nearly a million dollars. It is of modern fire-proof construction and is furnished throughout with standard appliances of the best material and design. Of the total of 250 beds, 175 are available for teaching purposes.

The Wilhenford Children's Hospital, containing fifty beds, is under the medical and surgical care of the teaching staff in pediatrics and furnishes material for clinical teaching in this specialty.

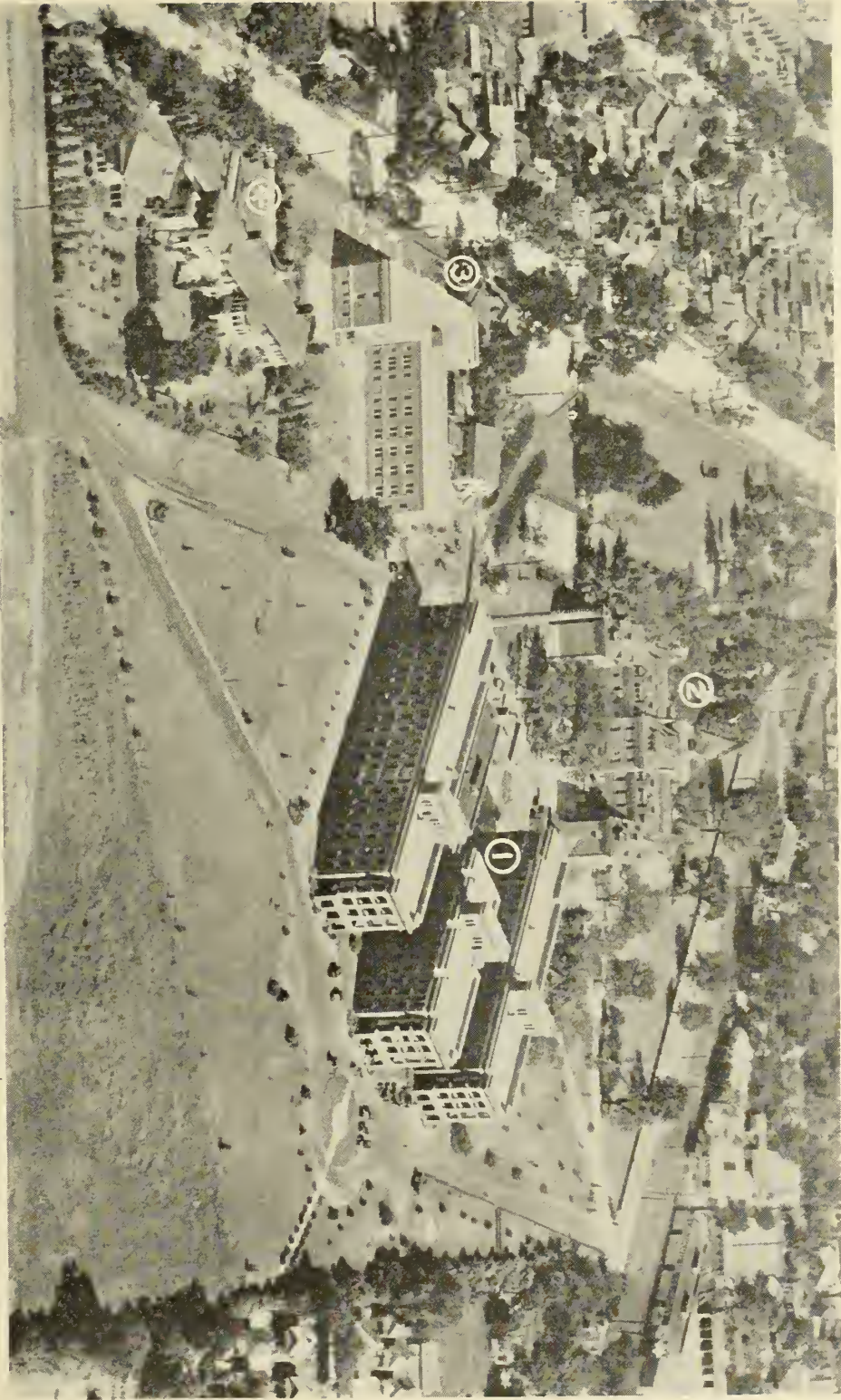
Through the courtesy of the Veterans' Bureau, the U. S. V. B. Psychiatric Hospital No. 62, located on the Hill, affords clinical material for the course in neuro-psychiatry. Members of the hospital staff give the didactic work at the college and the clinical teaching at the veterans' hospital.

Due to the addition of new full-time teaching departments and to growth of the preclinical departments, as a result of increase in enrollment, the college is very much in need of more space. To supply this need the alumni association recently made an appeal to graduates and others interested in medical education in Georgia and more than a quarter of a million dollars was subscribed for a new edifice to be called the Centennial Memorial Building. As soon as a sufficient portion of the sum subscribed has been collected, work on the new building will begin. It is hoped that this construction will start not later than the fall of the present year.

Herewith are presented two photographs, one representing an airplane view of the campus and buildings and the other a view of the proposed Centennial Memorial Building.



Airplane view of the buildings and campus of the University of Georgia Medical Department  
 1 University Hospital. 2 Medical Department of University of Georgia. 3 Doughty Nurses Home. 4 With enford Children's Hospital.



The campus is situated near the geographical center of the city and visiting members of the Medical Association of Georgia are

invited to inspect the plant when attending the annual convention in May.

G. LOMBARD KELLY, M. D.

## HEADQUARTERS



## PARTRIDGE INN

Large window space in all rooms. Large private furnished verandas. Electric elevator from the ground floor to Sun Parlor on roof. Light, attractive dining-room, white service. Lobby and Sun Parlor 50x160 feet. Library of 400 volumes free to guests. News and cigar store. Telegraph office.

## HOME-LIKE AIMS

The ownership-management of the Inn has but one aim and ambition—that the Partridge Inn shall bear the reputation of being a comfortable, pleasant and home-like hotel. No air of cold and formal stateliness or aloofness is here striven for or occurs. We wish this hotel to be a place where guests return again and again after their initial visit, and such is largely the case, for a large portion of the accommodations are occupied year after year by the same patrons.

## ATTRACTIONS

The Augusta Gun Club, with a modern plant which was completed last summer, in the opinion of many experts, is one of the finest in America. Those who enjoy trap shooting can avail themselves of this privilege daily.

The Outboard Motor Club, organized in the early spring, is quartered in a delightful club house, and speed boat enthusiasts can enjoy this sport at all times.

There are many attractive tea houses in and around Augusta, which are enjoyed by the visitors during the afternoons.

Augusta has many points of historical interest which will appeal to many of the visitors.

There are many beautiful drives for those who enjoy automobiling, on paved roads in the vicinity of Augusta.

All visitors receive a cordial welcome, and it is the endeavor of the community to do all in their power for their convenience and happiness while they are in our midst.

## COUNTY AND DISTRICT SOCIETIES

## COUNTY SOCIETIES

## 1930 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 5, 1929.
2. Barrow County, Dr. W. L. Mathews, Winder, December 5, 1929.
3. Dougherty County, Dr. I. M. Lucas, Albany, December 28, 1929.
4. Lamar County, Dr. J. M. Rogers, Barnesville, January 6, 1930.
5. Turner County, Dr. J. H. Baxter, Ashburn, February 10, 1930.
6. Monroe County, J. O. Elrod, Forsyth, February 18, 1930.
7. Wayne County, Dr. A. J. Gordon, Jesup, March 20, 1930.
8. Stephens County, Dr. C. L. Ayers, Toccoa, April 2, 1930.
9. Upson County, Dr. R. L. Carter, Thomaston, April 3, 1930.

\*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

## NEW MEMBERS FOR 1930

Anderson, J. J., Savannah.  
 Bailey, L. A., Augusta.  
 Baker, E. M., Savannah.  
 Barker, H. L., Carrollton.  
 Barton, J. J., Dublin.  
 Blanchard, R. M., Atlanta.  
 Boling, Edgar, Atlanta.  
 Brittingham, John W., Augusta.  
 Byrd, M. M., West Point.  
 Carter, C. B., Columbus.  
 Crawley, J. G., Jr., Rome.  
 Crichton, Robt. B., Atlanta.  
 Davis, J. W., Athens.  
 Dorsey, Homer A., Pitts.  
 English, R. E. L., Experiment.  
 Garner, J. E., Thomaston.  
 Googe, Wm. R., Abbeville.  
 Graydon, E. L., Atlanta.  
 Jones, A. B., Jr., Quitman.  
 King, O. D., Carrollton.  
 Lancaster, H. H., Hoschton.  
 MacAvelia, M. T., Atlanta.  
 Moody, E. A., Odum.  
 Perry, Samuel W., Atlanta.  
 Reddick, A. B., Sylvania.  
 Rushing, W. E., Millhaven.  
 Rutland, S. C., LaGrange.  
 Slocum, C. B., Doerun.  
 Smith, H. P., Pearson.  
 Tillery, Bert, Columbus.  
 Wilson, R. B., Atlanta.



## THE FIFTH DISTRICT MEDICAL MEETING

The spring meeting of the Fifth District Medical Society will be held at the Academy of Medicine, 38 Prescott Street, Northeast, Atlanta, Ga., on Wednesday evening at 8:00 o'clock, April 30th. The speaker of the evening will be Dr. Irving W. Potter, of Buffalo, N. Y. The paper will be "The Technique of Version and Extraction", with lantern slide demonstrations, including illustrations of immediate repair of birth canal injuries.

Dr. Potter is a nationally known obstetrician and all ethical doctors are cordially invited to attend this meeting.

M. T. HARRISON, M. D., *Secretary*,  
Fifth District Medical Society.

## COUNTIES REPORTING FOR 1930 SUMTER COUNTY MEDICAL SOCIETY

Sumter County Medical Society announces the following officers for 1930:

President—J. W. Chambliss, Americus.  
Vice-President—J. C. Logan, Plains.  
Secretary-Treasurer—H. M. Tolleson, Smithville.  
Delegate—J. F. Lunsford, Preston.  
Alternate—Herschel A. Smith, Americus.

## BROOKS COUNTY MEDICAL SOCIETY

Brooks County Medical Society announces the following officers for 1930:

President—E. L. Jelks, Quitman.  
Secretary-Treasurer—R. E. McClure, Quitman.

## CLARKE COUNTY MEDICAL SOCIETY

Clarke County Medical Society announces the following officers for 1930:

President—John A. Hunnicutt, Jr., Athens.  
Vice-President—W. H. Cabaniss, Athens.  
Secretary-Treasurer—M. A. Hubert, Athens.  
Delegate—P. L. Holliday, Athens.  
Alternate—J. A. Hunnicutt, Jr., Athens.  
Censors—H. I. Reynolds, J. C. McKinney and P. L. Holliday.

## COFFEE COUNTY MEDICAL SOCIETY

Coffee County Medical Society announces the following officers for 1930:

President—D. H. Meeks, Nicholls.  
Vice-President—L. H. Shellhouse, Willachoochee.  
Secretary-Treasurer—W. L. Hall, Nicholls.  
Delegate—D. H. Meeks, Nicholls.  
Censors—T. H. Clark and A. S. M. Coleman.

## GRADY COUNTY MEDICAL SOCIETY

Grady County Medical Society announces the following officers for 1930:

President—Eugene Clower, Cairo.  
Vice-President—W. R. Moore, Cairo.  
Secretary-Treasurer—J. V. Rogers, Cairo.  
Delegate—A. B. Reynolds, Cairo.

## MORGAN COUNTY MEDICAL SOCIETY

Morgan County Medical Society announces the following officers for 1930:

President—D. M. Carter, Madison.  
Vice-President—W. M. Fambrough, Bostwick.  
Secretary-Treasurer—W. C. McGeary, Madison.  
Delegate—J. L. Porter, Rutledge.  
Alternate—W. C. McGeary, Madison.  
Censors—W. C. McGeary, D. M. Carter and J. L. Porter.

## CAMPBELL COUNTY MEDICAL SOCIETY

Campbell County Medical Society announces the following officers for 1930:

President—W. R. Camp, Fairburn.  
Vice-President—T. P. Bullard, Palmetto.  
Secretary-Treasurer—A. J. Green, Union City.  
Delegate—R. T. Camp, Fairburn.

## WARE COUNTY MEDICAL SOCIETY

Ware County Medical Society announces the following officers for 1930:

President—H. G. Huey, Homerville.  
Vice-President—B. R. Bussell, Waycross.  
Secretary-Treasurer—W. L. Pomeroy, Waycross.

## TROUP COUNTY MEDICAL SOCIETY

Troup County Medical Society announces the following officers for 1930:

President—Enoch Callaway, LaGrange.  
Vice-President—S. C. Rutland, LaGrange.  
Secretary-Treasurer—Hugh McCulloh, Jr., West Point.  
Delegate—Frank J. Amis, Hogansville.  
Alternate—W. P. Phillips, LaGrange.  
Censor—Rance O'Neal, C. W. Harvey and H. H. Hammett.

## MUSCOGEE COUNTY MEDICAL SOCIETY

Muscogee County Medical Society announces the following officers for 1930:

President—C. Amory Dexter, Columbus.  
Vice-President—Francis B. Blackmar, Columbus.  
Secretary-Treasurer—Hugh J. Bickerstaff, Columbus.  
Censors—G. S. Murray, W. P. Jordan and G. J. Dillard.

## JACKSON COUNTY MEDICAL SOCIETY

Jackson County Medical Society announces the following officers for 1930:

President—H. E. Crow, Talmo.  
Vice-President—F. M. Hubbard, Commerce.  
Secretary-Treasurer—J. C. Bennett, Jefferson.  
Delegate—C. B. Lord, Jefferson.  
Alternate—A. A. Rogers, Commerce.  
Censors—L. C. Allen, W. C. Kennedy and J. C. Verner.



## NEWS ITEMS

The Dougherty County Medical Society met at the Phoebe Putney Memorial Hospital, Albany, March 11th. Dr. J. A. Redfearn, read a paper entitled "What is Heart Disease". Drs. J. C. Keaton and F. K. Neill led the discussion. The society was host to the members of the Second District Medical Society at its meeting held on April 9th.

The Surgical Association of the Atlanta and West Point Railroad Company et al held its tenth annual meeting at Hotel Ansley, Atlanta, March 13th. The scientific program consisted of the following titles of papers: What Constitutes First Aid by Dr. E. T. Newsom, Union Point; Leg Ulcers by J. M. Poer, West Point; Management of Shock by Dr. W. W. Harper, Selma, Alabama; Eye Injuries by Dr. T. E. Oertel, Augusta; Osteogenic Sarcoma by Dr. R. H. Fike, Steiner Cancer Clinic, Atlanta; Diabetes by Jas. E. Paullin, Atlanta; Reclamation of Men by Dr. Eugene E. Murphey, Augusta; Malingering by Dr. Newdigate M. Owensby, Atlanta; Joint Injuries by Dr. Geo. E. Blue, Montgomery, Alabama; Congenital Back Anomalies Frequently Alleged Due to Injuries by Dr. H. M. Michel, Augusta.

The Clarke County Medical Society met at the Holman Hotel, Athens, March 7th. Dr. Harold I. Reynolds read a paper entitled Poliomyelitis.

The Randolph County Medical Society in cooperation the State Board of Health and the Children's Bureau of the Department of Labor, Washington, D. C., sponsored a short intensive course in the Principles and Practice of Obstetrics, which was given at Cuthbert during the week of March 24th. Dr. Jas. R. McCord, Atlanta, gave lectures on the following subjects: March 24, The Mechanism and Management of Normal Labor; March 25, Puerperal Infections; March 26, Occiput Posterior Positions-Forceps; March 27, Versions-Breech Presentations; March 28, The Hemorrhages of Pregnancy, Abortion, Placenta Previa, and Accidental Separation of the Placenta.

The Georgia State Railway Surgeon's Association will hold its annual meeting at Partridge Inn, Augusta, May 13th.

The Georgia Health Officer's Association will meet at the Partridge Inn, Augusta, May 14th. Luncheon will be served at the meeting with round-table discussions.

The Randolph County Medical Society met in Cuthbert, April 3rd. Dr. J. C. Patterson, Cuthbert, read a paper entitled Cervicitis; Dr. Loren Gary, Georgetown, gave a case report.

The Eleventh District Medical Society met in Waycross on April 8th. The Ware County Medical Society was host.

Dr. Wm. Nevin Adkins announces the resumption of practice and reopened offices at 601 Medical Arts

Building, Atlanta. Consultation by appointment.

The members of the Ware County Medical Society were successful in an election held recently which voted a bond issue on Ware county for the sum of \$150,000.00 to build and equip a hospital with one hundred bed capacity. The institution will have charity and part pay wards with private rooms for pay patients. All modern conveniences will be installed for the care and comfort of inmates.

Dr. N. L. Barker announces the removal of his office to 525 Seminole Avenue, N. E., Atlanta.

Dr. O. H. Cheek, Dublin, entertained the doctors attending the malaria conference held recently in Dublin at a fish luncheon.

The Wayne County Medical Society met in Jesup, March 5th. Program was outlined for Health Education Week, May 5-10. Clinics will be held in Jesup, Odum and Screven.

Dr. and Mrs. W. P. Coffee, Fitzgerald, entertained the members of the Ben Hill County Medical Society at their home on March 4th.

Dr. E. F. Thompson, Valdosta, entertained the members of the Lowndes County Medical Society at the Valdes Hotel on March 15th. Dr. Gordon T. Crozier delivered an address on Infant Mortality. He stated that Lowndes county had made the greatest progress of any county in the state in reducing infant mortality from 74 per thousand in 1928 to 42 per thousand in 1929.

Drs. C. Thompson and H. G. Lee, Millen, entertained the members of the Jenkins County Medical Society, a number of the doctors from adjoining counties and several of the officers of the Association at a fish supper on March 11th at the Ogeechee Club. Papers read were entitled as follows: Heart Disease and Digitalis by Dr. Allen H. Bruce, Atlanta; Cancer by G. T. Bernard, Augusta; Organization by Dr. Wm. H. Myers, Savannah.

Dr. B. O. Quillian, formerly of McRae, has removed to Douglas.

The Ninth District Medical Society met at Commerce on March 19th.

Dr. W. P. Kirkland, formerly of Pearson, has removed to Manchester and will be associated with Dr. J. A. Johnson in general practice.

The Bibb County Medical Society met at the Macon Hospital, March 18th. Dr. W. E. Mobley gave a Case Report.

Dr. Chas. E. Hall announces the removal of his office to 422 Candler Building, Atlanta.

Doctors L. C. and M. B. Allen, Hoschton, have opened a hospital in connection with their clinic in a new two story building. Doctors H. H. Lancaster

and Loyd Lott are associated with them. Offices of the entire medical staff will be in the hospital building.

Dr. and Mrs. E. H. Lamb, Cornelia, entertained the members of the Habersham County Medical Society at their home on March 14th.

Dr. and Mrs. William J. Turner, Ashburn, entertained the members of the Turner County Medical Society and their wives at their home on March 14th.

Regional Conference of the American Social Hygiene Association, under the auspices of the Louisiana State Board of Health and the New Orleans Council of Social Agencies, at the Hotel Roosevelt, New Orleans, May 26-27. Institutes will be held on Friday and Saturday (May 23-24). Public meeting Sunday. Speakers from most of the southern and southwestern states will take part in the program, as well as several representatives from the national society. The meeting should prove of great interest to physicians, public health workers, social service workers and members of parent-teacher organizations.

Beginning this year the American Association for the Study of Goiter will award a cash prize of \$300 annually for the best original thesis dealing with some phase of the goiter problem. These should be submitted by June 1, to Doctor Walter M. Simpson, Chairman of the Essay Committee, Miami Valley Hospital, Dayton, Ohio. The award will be given immediately following the coming meeting of the Association which is to be held in Seattle, Washington, July 10-12, 1930.

The Seventh District Medical Society held its semi-annual meeting at Cartersville, April 2nd, as the guest of the Bartow County Medical Society. The scientific program was made up of the following titles: A Resolution in Regard to the Affairs of the State Sanitarium by Dr. W. W. Young, Atlanta; Neglected Surgical Conditions by Dr. C. D. Elder, Marietta; A Review of the Treatment of Malignant Tumors by Dr. J. L. Campbell, Atlanta; Abdominal Pains by Dr. P. O. Chaudron, Cedartown; The Management of the First, Second and Third Stages of Normal Labor by Dr. R. A. Bartholomew, Atlanta; The Treatment of Cardiac Insufficiency with Special Reference to the Action of Digitalis by Dr. H. Clifford Sauls, Atlanta; Treatment of Burns by Dr. Seals L. Whitely, Cedartown; The Thyroid in Adolescence by Dr. Chas. E. Waits, Atlanta; The Importance of Using Fresh Fruits and Vegetables in the Diet of Young Children by Dr. M. M. McCord, Rome; Carcinoma of Colon—the Importance of Early Diagnosis by Dr. Allen H. Bunce, Atlanta; Non-Union of Bones on Fracture Cases by Dr. J. H. Mull, Rome; Prenatal Care by J. F. Crane, Rome.

Dr. Murdock Equen, Atlanta, read a paper before the Southern Section Meeting of the American Laryngological, Rhinological and Otological Society,

at Roanoke, Virginia, January 18th, entitled Presentation of Cases. (a) Atelectasis of the Lower Left Lobe, Due to Impacted Wisdom Tooth—Recovery. (b) Massive Collapse of the Entire Left Lung, Due to Impacted .22 Cartridge Shell—Recovery.

Dr. Grady E. Clay announces the resumption of practice with offices in the Medical Arts Building, Atlanta. Practice limited to ophthalmology. Dr. Clay is Associate Professor of Clinical Ophthalmology of Emory University School of Medicine.

The Fourth District Medical Society met at Carrollton, April 8th as the guest of the Carroll County Medical Society. The scientific program was made up of the following titles: Curability of Cancer by Dr. Enoch Callaway, LaGrange; Carcinoma of the Colon, Importance of Early Diagnosis by Dr. Allen H. Bunce, Atlanta; Address by Dr. William R. Dancy, Savannah, President of the Association; Treatment of Eclampsia, Review of Recent Advances; Detailed Technique Used—Case Reports by Dr. H. J. Bickstaff, Columbus; Ether Anesthesia, General in Scope by Dr. C. A. Dexter, Columbus; The Value of Graded or Multiple Stage Measures in Surgery by Dr. Ben H. Clifton, Atlanta; Treatment of Syphilis, Resume of Recent Advances—Consideration of Adequate Therapy by Dr. W. P. Jordan, Columbus; Diabetes, General Emphasis on Practical Points and Atypical Cases by Dr. G. J. Dillard, Columbus; Use of Lipo-Iodine in the Diagnosis of Maxillary Sinus Diseases by Dr. F. B. Blackmar, Columbus; Treatment of Ruptured Gastric and Duodenal Ulcers. Illustrations by Dr. H. H. Askew, Atlanta.

The Second District Medical Society met at Albany on April 11th, the guest of the Dougherty County Medical Society. Dr. J. A. Redfearn, Albany, read a paper entitled Home Treatment of Pulmonary Tuberculosis; Dr. Wm. L. Wilkinson, Bainbridge, The Association of Abdominal Pain with Throat Infection in Children; Dr. Arthus D. Little, Thomasville, The Pelvic Organs in the Female, Discussed from a Pathological Standpoint; Dr. T. H. D. Griffiths, Albany, Malaria Control.

Dr. C. M. Sharp has resumed the practice of medicine and is now on the staff of a private hospital at Saranac Lake, New York. He will be in charge of the institution and medical director after June 1st.

The Doctors Building at 478 Peachtree Street, N. E., Atlanta, was destroyed by fire early Sunday night, April 6th. The financial loss was estimated at approximately \$750,000.00. The loss of clinical records and other data is inestimable. Members of the Association who maintained offices in the building and have since opened permanent offices at other locations are as follows:

Baggett, L. G., Candler Building, Atlanta.  
Barker, N. L., Candler Building, Atlanta.  
Blackburn, Jno. D., 96 Linden Avenue, N.E., Atlanta.

Boland, Frank K., Apartment 12, 131 Forrest Avenue, N. E., Atlanta.

Boling, Edgar, 1119 Peachtree Street, N.E., Atlanta.

Bowcock, Harold M., 762 Juniper Street, N. E., Atlanta.

Burke, B. Russell, 1007 Medical Arts Building, Atlanta.

Calhoun, F. Phinizy, Apartment 18, 131 Forrest Avenue, N. E., Atlanta.

Campbell, J. L., 96 Linden Avenue, N. E., Atlanta.

Clark, W. B., 1007 Medical Arts Building, Atlanta.

Crawford, H. C., 1007 Medical Arts Building, Atlanta.

Davison, T. C., 1119 Peachtree Street, N. E., Atlanta.

Denton, Jno. F., 104 Ponce de Leon Avenue, N. E., Atlanta.

Dorough, W. S., 96 Linden Avenue, N. E., Atlanta.

Elkin, Dan C., Apartment 15, 131 Forrest Avenue, N. E., Atlanta.

Elkin, W. S., Apartment 15, 131 Forrest Avenue, N. E., Atlanta.

Fort, Lynn, 1107 Medical Arts Building, Atlanta.

Fuller, Geo. W., Candler Building, Atlanta.

Giddings, Chas. G., 131 Forrest Avenue, N. E., Atlanta.

Holmes, C. H., 96 Linden Avenue, N. E., Atlanta.

Holmes, Walter R., 754 Juniper Street, N. E. Atlanta.

Hurt, Jno. S., 96 Linden Avenue, N. E., Atlanta.

Jackson, Zach W., Apartment 18, 131 Forrest Avenue, N. E., Atlanta.

Johnson, J. Clarence, 96 Linden Avenue, N. E., Atlanta.

Johnson, Trimble, 96 Linden Avenue, N. E., Atlanta.

Key, Claud T., 78 Ellis Street, N. E., Atlanta.

Kirkland, S. A., Apartment 13, 131 Forrest Avenue, N. E., Atlanta.

Lowance, Mason I., 1119 Peachtree Street, N. E., Atlanta.

Martin, J. D., Jr., Apartment 15, 131 Forrest Avenue, N. E., Atlanta.

Martin, J. J., 105 Forrest Avenue, N. E., Atlanta.

Nicolson, Wm. P., 96 Linden Avenue, N. E., Atlanta.

Roberts, J. W., 762 Juniper Street, N. E., Atlanta.

Rushin, C. E., 96 Linden Avenue, N. E., Atlanta.

Shanks, Edgar D., 96 Linden Avenue, N. E., Atlanta.

Smith, Wm. R., 762 Juniper Street, N. E., Atlanta.

Swanson, Cosby, 105 Forrest Avenue, N. E., Atlanta.

Yankey, W. E., 35 Linden Avenue, N. E., Atlanta.

Young, W. W., 96 Linden Avenue, N. E., Atlanta.

*The following have opened temporary offices:*

Ballenger, W. L., 105 Forrest Avenue, N. E., Atlanta.

Barfield, J. R., 105 Forrest Avenue, N. E., Atlanta.

Block, E. Bates, 1372 Peachtree Street, N. E., Atlanta.

Clark Jas. J., Medical Arts Building, Atlanta.

Quillian, W. E., 403 Medical Arts Building, Atlanta.

White, J. R., 157 Forrest Avenue, N. E., Atlanta.

Wilson, R. B., 690 Juniper Street, N. E., Atlanta.

## OBITUARY

*Dr. J. M. Head, Zebulon*; Emory University School of Medicine, 1891; aged 77; died at his home on April 9, 1930. He was a member of a prominent family and one of the oldest and most respected physicians of his community. Dr. Head was born in Meriwether county and after graduating in medicine removed to Pike county where he had a large practice until he retired to engage in the operation of a chain of drug stores in Atlanta, Griffin and Macon. On account of ill health, he sold his interest in all the stores and returned to his old home in Zebulon. During the World War and until a few years ago, he edited the Pike County Journal. Surviving him are his widow, one daughter, Miss Lutie Head, Atlanta; four sons, Drs. M. M. and D. L. Head, Zebulon; H. W. Head, Anniston, Alabama; P. B. Head, Phoenix, Arizona. Funeral services were conducted from the home and interment in East View cemetery.

*Dr. Elijah L. Connally, Atlanta*; Emory University School of Medicine, Emory University, 1859; aged 93; died at his home March 16, 1930. He was born in Floyd county, near Rome, and was one of the pioneer physicians of the South. Dr. Connally served in the Civil War and established an extensive practice after the war. His career was closely identified with the history of Atlanta. Reared from childhood on the home place in the Atlanta neighborhood, he was given the best educational advantages and very early turned his attention to the study of medicine. Dr. Connally was a member of the second class to enter the Atlanta Medical College, established in 1854. He was a member of the Second Baptist church. Funeral services were conducted from the church by Rev. Carter Helm Jones and interment in Oakland cemetery.

*Dr. William D. Roper, Atlanta*; Georgia College of Eclectic Medicine and Surgery, 1904; aged 63; died at a private sanitarium on March 16, 1930. He was born in Pickens, South Carolina, and moved to Atlanta about thirty-five years ago. Dr. Roper has been one of Atlanta's best known practitioners. For the past eight years he has limited his practice almost entirely to office work. Surviving him are his widow, two daughters, Mrs. R. D. Wilson and Miss Glenna Roper; two sons, William D., Jr. and Mark H. Roper, all of Atlanta. Funeral services were conducted from the residence, 197 Poplar Circle, N. E., by Rev. R. L. Russell. Interment was in Greenwood cemetery.

*Dr. Walter M. Burckhalter, Comer*; University of Georgia Medical Department, Augusta, 1899; aged 60; died at a private sanitarium on March 18, 1930. He was born in Oglethorpe county. Dr. Burckhalter practiced in Comer and surrounding community for twenty four years. Surviving him are his widow, three daughters, Mrs. C. L. Vaughn, Athens; Mrs. J. L. Williams, Atlanta; and Miss Lucweene



Burckhalter, Comer. Funeral services were conducted from the residence by Rev. J. B. Brown. Interment was in Comer cemetery.

*Dr. Henry Dawson Allen*, Milledgeville; member: Emory University School of Medicine, Emory University, Georgia, 1879; aged 74; died at his home on March 22, 1930. He was one of the most beloved citizens of Baldwin county. Dr. Allen founded the Allen's Invalid Home at Milledgeville in 1895. He was chairman of the board of directors of the Exchange Bank and a member of the board of directors to the Merchants and Farmers Bank, both of Milledgeville. Dr. Allen was active in civic and religious work. He was a member of the Baldwin County Medical Society, American Psychiatric Association and the American Medical Association. Surviving him are his widow, four daughters; Mrs. Chas. L. Moore, Miss Floride Allen, Miss Jessie Allen, and Mrs. Jerry N. Moore; three sons, Dr. Edwin W. Allen and Dr. H. D. Allen, Jr., Milledgeville; and Dr. Powell Allen of New York. Funeral services were conducted from the Methodist church.

*Dr. Wm. Henry Johnson*, Atlanta; Emory University School of Medicine, Emory University, Georgia; aged 56; died at his home on March 24, 1930 after an illness extending over a period of eight months. He was born and reared in Gwinnett county. Dr. Johnson was a member of the Masonic lodge and the Methodist church. Funeral services were conducted from the residence by Rev. R. Z. Tyler. Burial was in West View cemetery.

*Mrs. George Ansley Wilcox*, Augusta; died at her home in Summerville on March 6, 1930, in her 77th year. She was a beloved woman of the old South and was known by many Southern doctors who graduated from the University of Georgia Medical Department, Augusta. She was a native of Chattanooga, Tennessee, and the widow of Dr. George Ansley Wilcox, deceased, Professor of Gynecology of the University of Georgia Medical Department, and a sister of the late Judge Howard Van Epps of Atlanta. Surviving her are two sons, Mr. George H. Wilcox, Atlanta, an officer of the Southern Railway System, and Dr. Everard Ansley Wilcox, Associate Professor of Gynecology of the University of Georgia Medical Department, Augusta.

#### HOSPITAL DAY

Hospitals throughout the United States and Canada are beginning plans for the tenth observance of National Hospital Day, May 12, according to information reaching Dr. J. R. Morrow, superintendent, Bergen Pines, Oradell, N. J., chairman of the National Hospital Day Committee of the American Hospital Association.

While some institutions which have observed the day since its start are seeking new ideas, the majority of the hospitals will have "open house," reunion of babies, inspection of departments and other features

which met with such success in previous years. Some of them undoubtedly have had the same experience as a hospital which decided to omit its "baby show" one year and found that the mothers, who had gathered in larger numbers than on the previous occasion, were greatly disappointed.

That more small hospitals will observe May 12 this year than in the past is the belief of some of the members of the National committee, owing to the tribute paid to small hospitals in rural sections by President Hoover in his endorsement of National Hospital Day.

Hospital councils in some cities focus all their attention at March and April meetings on plans for a joint observance of National Hospital Day. The Chicago Hospital Association is among those doing this at this time. The association, incidentally, already has been tendered time on two radio stations.

The national committee is in touch with large manufacturers and others using nation-wide radio hookups and hopes to extend the radio publicity given National Hospital Day last year. Many hospitals also are making arrangements for individual radio programs, as in the past.

Most of the hospitals conducting schools of nursing which will have a National Hospital Day program will give considerable attention to a presentation of facts about nursing education and nursing service, keeping in mind that May 12 is the anniversary of the birth of Florence Nightingale.

#### THE IMPORTANCE OF LONG EXPERIENCE

"There is one thing about Mead Johnson & Company I like," said the physician who had visited the Research Laboratory at Evansville. "They don't go off half-cocked. You never hear of any severe nutritional disturbances resulting from their infant diet materials. Before they put a product on the market, they study and test it with infinite patience, and very quietly.

"For example, they have been working with vitamin B for eight years and only now in the Journal of the A. M. A. for March 22nd are they publishing the fact that they evolved a vitamin B concentrate eight years ago.

"They have been working on a new form of Dextri-Maltose (with vitamin B) which they are about to market. I'll wager there won't be any diarrheas or other untoward results with this preparation. Mead Johnson's research before marketing is too thorough."

The members of the Richmond County Medical Society and their wives are anxious to entertain the members of the Association and Auxiliary during the annual session of the Association, to be held in Augusta, May 13, 14, 15, 16.

## CONSTITUTION AND BY-LAWS

(Continued from Page 164)

American Medical Association shall be those of this Association.

Sec. 4. Any member of this Association, on locating in a new place for practicing his profession may place his professional card, containing name, address, telephone number, and statement as to whether or not his practice will be limited to any particular class of disease, in the local paper for a period of not longer than one month. The placing of such card for this period of time shall not be considered unethical. The use of the word "specialist" by any member in connection with his name in any newspaper, telephone directory, or other public places, shall be considered unethical.

## CHAPTER IX.—AMENDMENTS

These By-Laws may be amended at any annual session by a majority vote of the Association after the amendment has lain on the table for one day.

RESOLUTIONS, MEDICAL  
ASSOCIATION OF GEORGIA

1921

Resolved, That a member who sends in a title of a paper to be placed on the program and is not present to read the paper, shall pay the penalty of not having an opportunity to appear on the program for two years, unless he presents an excuse acceptable to the Committee on Scientific Work.

1922

Be it Resolved, That the House of Delegates recommend that the Committee on Scientific Work make available on the program of the State Association space for two papers from each Councilor district; that a definite time be assigned for reading and discussion of each of these papers, and they be given precedence over all other business. The said papers are to be selected by the Committee on Scientific Work, and, in case a writer does not respond when his name is called, some paper will be substituted and the schedule not deranged. The President ruled that this resolution is only a recommendation and not a law.

1928

Resolved, That the delegates to the A. M. A. elected at this and succeeding meetings of the Medical Association of Georgia take office January 1st, following their election, and that their term of service run for two years thereafter. And be it further

Resolved, That our delegates be authorized to attend the regular and any called meeting of the House of Delegates of the American Medical Association during the term to which they are elected.

1929

Resolved, That the House of Delegates approve the increase of dues to \$7.00 per capita per annum.

Resolved, That the House of Delegates adopt the report of the Council authorizing the Committee on Public Policy and Legislation to spend the necessary amount of money to carry on its work.

Resolved, That in order to expedite the business of the House of Delegates, all reports of special and regular committees of the Association involving matters of public policy, legislation or appropriation of the funds of the Association be submitted in writing to the Secretary of the Association a sufficient time in advance of the regular annual session, about March 15th, to permit of the publication of said recommendations either in the official program prior to the session or in a special circular that shall be mailed to the constituent societies, in order that the delegates may be advised of the proposed changes. (May, 1929, page 475.)

## BY-LAWS, PROPOSED AMENDMENT

Chapter IV, Section 2, be amended by adding the following: "and shall be ex-officio member of the standing committees, and shall make recommendations at the next annual session." So when amended the second paragraph of Chapter IV, Section 2, will read as follows: "In order to give him an opportunity to become better acquainted with his duties and with the needs of the Association, the President shall be elected one year prior to taking office. During this time he shall be known as President-Elect and shall be ex-officio member of the standing committees, and shall make recommendations at the next annual session."

## COMMUNICATIONS

(Continued from Page 164)

easy for you to get acquainted—5 months for \$1.00—instead of the regular \$3.00 per year rate. And immediately upon receipt of your order, you will be sent FREE, one of the Human Factory Charts. The enclosed card is for your convenience.

Very truly yours,

AMERICAN MEDICAL ASSOCIATION.

F. V. CARGILL,

Circulation Manager HYGEIA, The Health Magazine.  
Chicago, Ill., March 31, 1930.

To the Editor:

Will you kindly have my address changed from U. S. Veterans' Hospital, Atlanta, Georgia, to U. S. Veterans' Hospital, Muskogee, Oklahoma.

I was transferred here as Medical Officer in Charge of this hospital February 15, 1930, from the Central Office of the U. S. Veterans' Bureau at Washington, D. C., where I was acting Chief of the General Medical Division of the Medical Service since September, 1929.

This is a splendid Hospital of four hundred bed capacity caring for general medical and surgical cases. Of course, we have a few beds for observation of neuropsychiatric patients and a limited number of beds set aside for the observation and treatment of pulmonary tuberculosis, however, the hospital is classed as a general hospital.

Kindly extend to all of my friends in Atlanta my very best regards. I guess the Veterans' Hospital at

Atlanta is nearing completion and I am sure that you people will have a splendid unit there.

Dr. Claude A. Thompson, Secretary of the State Medical Association of Oklahoma, is a member of my Staff and is Chief of the Surgical Service here. He sends kindest regards to you!

I have mailed my dues to the Macon Medical Society of Bibb County for the year 1930 and would appreciate it if you will send my card to me at this address, also see that the Journal is sent me here.

GEO. L. JOHNSON, M.D.

Muskogee, Oklahoma.

Medical Officer in Charge, U. S. Veteran's Hospital,  
April 1, 1930.

#### SUBJECTS FOR LECTURES\*

List of papers for addresses during HEALTH EDUCATION WEEK, May 5 to 10.

Tuberculosis.  
Venereal Diseases.  
Diphtheria.  
Pellagra.  
Cancer.  
Malaria.  
Typhoid.  
Hookworm.  
Epidemic Influenza.  
Communicable Diseases.  
War on Heart Disease.  
The Ear and It's Diseases.  
Do Your Feet Hurt?

Colds and Their Complications.  
What to do When a Bone is Broken.  
Infantile Paralysis.  
Convulsions in Infancy and Childhood.  
Need of State Lye Legislation.  
The Nervous Child.  
Pigs vs. Children.  
Mental Hygiene in Children.  
Correction of Defects in School Children.  
Pre-Natal and Post-Natal Care of Mothers.  
Proper Diet.  
Bread.  
Teaching Children to Like Wholesome Foods.  
Infant Feeding.  
Keeping Employees in Good Health.  
Reasons for Periodic Health Examinations.  
Working for One's Health.  
Preventive Medicine.  
Bacteriology.  
What You Don't Know (Bac).  
Sanitation of Home and School.  
Dangers of Sunlight.  
Radium Fakes.  
Private Rights vs. Public Safety in the Matter of Health.  
The Middle-Aged Woman—What is She Worth?  
High Spots in 50 Years of Medical Progress.  
Electrical Hazards in the Home.

\*Copies of addresses on any of the above subjects may be secured by writing the Secretary Treasurer, 139 Forrest Avenue, N. E., Atlanta.

## Special Sleepers

TO

## DETROIT

ACCOUNT

## American Medical Association

JUNE 23-27, 1930

VIA

## Louisville & Nashville Railroad

These Special Sleepers will leave Atlanta June 21st and 22nd on following trains:

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The Flamingo  
6:15 P.M.  
4:23 P.M.

The Southland  
7:50 A.M.  
8:35 A.M.

The usual Convention Fares have been authorized for this meeting. Attractive variable tour tickets to New York, Boston, Montreal and many other points.



OBSERVATION AND DINING CARS ON BOTH TRAINS  
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EVERT A. BANCKER, JR., M.D., Electrocardiography

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ATLANTA, GA.

Approved by the Council on Medical Education and Hospitals of the American Medical Association.

#### DRUG ADDICTS

Drug and Alcoholic patients are humanely and successfully treated in Glenwood Par Sanitarium, Greensboro, N. C.; reprints of articles mailed upon request. Address W. C. Ashworth, M.D., Owner, Greensboro, N. C.

**Lac-Bismo**  
(HART)

See Description, Journal A.M.A.  
Volume XLVII, Page 1488.

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## A MAN OF MEDICINE\*

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### *Introduction*

In the beautiful city of Washington, rising from a veritable garden spot of earth, is a perfect shaft of stone piercing the overhanging clouds. This remarkable specimen of the sculptor's art stands as a striking memorial to General George Washington.

On a magnificent picturesque parkway in the city of Richmond, Va., is implanted that superb equestrian statue, erected by loving hearts to the adoration and honor of that peerless leader of the Confederacy, General Robert E. Lee.

On the cold granite sides of Stone Mountain in our own great State of Georgia are emerging the figures of the heroes of that famous struggle, the War Between the States. This is to be the greatest natural monument of all time, to the greatest people on earth.

In historic Trafalgar Square, London, overshadowing the great avenues of commerce of that wonderful city, is a superb cylindrical shaft surmounted by a figure in bronze of the greatest British hero of the seas, Lord Nelson.

Of more modest proportions but bearing the same affectionate love, profound respect, and sincere appreciation, are the several memorials to one of the most eminent men of medicine who ever graced our profession. These are placed in Oxford, in Baltimore, in Montreal. The several memorials have been erected to no lesser personage than Sir William Osler. And I take this formal opportunity of expressing my love and admiration

of him, as a teacher and as a friend, by making him the subject of my Presidential Address.

It is expected of a retiring president that he, as a result of his year's experience, impart some suggestions in an advisory way, to tell you of new plans of procedure with flattering results, to supply you with well-developed and universally applicable methods for the relief of all chronic ailments of organized medicine. These might be told in fact, but if they did not appeal to your individual line of reasoning or quite suit your human convenience, you would cast them aside without serious consideration. Be this as it may, I propose to illustrate certain traits and principles which should stimulate the ambitions of every physician to attain a certain standard of excellence, of efficiency, of merit in the profession. I trust to do this by revealing to you these qualities in the life and character of this great physician whom you know. I trust this will so impress you as to inspire you to attempt to reach the same pinnacle of worthy success that he did. I shall recall to your minds certain outstanding traits in his brilliant and many sided life, in the hope that you might pick one or two lessons from his wonderful career and, applying them to yourself, reap a wealth of profit therefrom.

The thought, which you should ever carry as the beacon light of your aspirations, ought to be the proper mental conception of the "Man of Medicine", which means the well-rounded physician of character, interested, proficient, active, kind and charitable, in all that contributes to a whole physician. In the art of the practice of medicine he should be industrious and proficient; in his charity to his patients, he should be most generous; in his dealings with his brother physicians, he should be fair and loyal and

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†Presidential address.

follow the dictum of Osler, "Never let your tongue say a slighting word of a colleague"; in his greatest wisdom he should impart his knowledge to the less fortunate (in the medical school or in the medical society); in his relationship to the public he should render benefits from the superior knowledge he possesses, by public health work and preventive medicine; and finally he should lend the weight of his influence and the benefit of his knowledge and experience, to the uplift and support of his State Medical Association, whereby he will help both himself and his fellow practitioner, and his profession at large in the estimation of the public.

Hear what Sir William Osler has to say:

"No other profession can boast of the same unbroken continuity of methods and ideals. We may indeed be justly proud of our apostolic succession. Schools and systems have flourished and gone, schools which for generations have swayed the thought of our guild; the philosophers of one age have become the absurdities of the next, and the foolishness of yesterday has become the wisdom of tomorrow; through long ages which were slowly learning what we are hurrying to forget, amid all the changes and chances of twenty-five centuries the profession has never lacked men who have lived up to these Greek ideals. They were those of Galen and Aretaeus, of men of the Alexandrian and Byzantine schools, of the best of the Arabians, of the men of the Renaissance, and they are ours today.

"A second distinctive feature is the remarkable solidarity. Of no other profession is the word 'universal' applicable in the same sense. The celebrated phrase used of the Catholic Church is in truth much more appropriate when applied to medicine. It is not prevalence of disease or the existence everywhere of special groups of men to treat it that betokens this solidarity, but it is the identity throughout the civilized world of our ambitions, our methods, and our work. To wrest from nature the secrets which have perplexed philosophers in all ages, to track to their source the cause of disease, to correlate the vast store of knowledge, that they

may be quickly available for the prevention and cure of disease—these are our ambitions. To carefully observe the phenomena of life in all its phases, normal and perverted, to make perfect the most difficult of all arts, the art of observation, to call to aid the science of experimentation, to cultivate the reasoning faculty, so as to be able to know the true from the false—these are the methods. To prevent disease, to relieve suffering, and to heal the sick—this is our work. The profession in truth is a sort of guild or brotherhood, any member of which can take up his calling in any part of the world and find brethren whose language and methods and whose aims and ways are identical with his own.

"Thirdly, its progressive character. Based on science, medicine has followed and partaken of its fortunes, so that in the great awakening which has made the nineteenth memorable among centuries, the profession received a quickening impulse more powerful than at any period in its history. With the sole exception of the mechanical sciences, no other department of human knowledge has undergone so profound a change—a change so profound that we who have grown up in it have but slight appreciation of its momentous character. And not only in what has been actually accomplished in unraveling the cause of disease, in perfecting methods of prevention, and in wholesale relief of suffering, but also in the unloading of old formulas, and in the substitution of the scientific spirit of free inquiry for cast-iron dogmas, we see a promise of still greater achievement and of a more glorious future.

"And lastly, the profession of medicine is distinguished from all others by its singular beneficence. It alone does the work of charity in a Jovian and God-like way, dispensing with a free hand truly Promethean gifts. There are those who listen to me who have seen three of the most benign endowments granted to the race since the great Titan stole fire from heaven. Search the scriptures of human achievements and you cannot find any way to equal in beneficence the introduction of anaesthesia, sanitation, with all



that it includes, and asepsis—a short half-century's contribution towards the practical solution of problems of human suffering, regarded as eternal and insoluble. Every new year sees some new conquest, so that we have ceased to wonder. The work of half a dozen men, headed by Laveran, has made waste places on the earth habitable, and the wilderness to blossom like the rose. The work of Walter Reed and his associates will probably make yellow fever as scarce in the Spanish Main as is typhus with us. Philosophers see, as in some far-off vision, a science from which may come in the prophetic words of Son of Sirach, 'Peace over all the earth'; and the word of the Master be with you."

To analyze the plan of life of such a versatile and well-rounded character as Sir William Osler seems a task indeed, one far beyond the feeble ability of the speaker, but it is hoped that enough will be gleaned by you to so carry the gospel of loyalty in the science and in the art of medicine that your lives may be examples of devotion to the greatest of all professions.

#### *Early Life*

Only by this one great life, that of Sir William Osler, do I feel can be illustrated the training, the education, the student, the character, "the way of life" that leads "A Man of Medicine" to the goal of his ambitions. The greatest exponent (Man) of modern medicine, he has shaped the destinies of present-day medicine, has stamped each of you with his impress. The very high regard that you who only study his writings hold for him is but a mite to the adorable esteem in which he is held by his students. One not intimately associated with him could never quite appreciate the fullness of his life.

Born, bred, taught, and reared in the parishes of Ontario, that country claims him "as the most perfect flower of her cultivation."

Sir William first saw the sunlit morn at the Bond Head Parsonage, Dundas, Ontario, on July 12, 1849, in the best of all environment and there began his fascinating life. He was the ninth and youngest child.

Gwyn tells us that Osler was born into a

family stamped strongly with hereditary traits and characteristics, grew up under conditions which seemed to take him easily and naturally forward to the threshold of a world waiting for his step. His inheritances were clearly marked and striking; the influences and environment follow one another in orderly fashion, each seeming to leave with him something for the emergencies of the future, while as concerns his training one is tempted to say that no child was ever better instructed in the elements of life—duty, obedience, and industry; and the chance that placed a boy of Osler's material gifts and qualities under the influence of Johnson, Bovell, and a group of natural scientists was a coincidence directed by a very special fate.

His father served in the English Navy and later went to Canada as a missionary. His mother, we are told, was a superior woman. I have heard him speak most affectionately of her loving interest in him.

You can appreciate the remarkable influence this good woman had upon him when I read you one of her letters:

"And now, my dear boy, let me have a little serious chat with you about entering the church, which you say you have made up your mind to do. My first impulse was to thank God that He had heard my prayer, and inclined one of my six boys to make choice of that as his path in life. It is a matter not to be decided on hastily any more than is any other profession. Take your time for consideration, and above all search your heart for the motive inducing your decision, for remember that God always judges us by our motives, while man can only judge of our actions. If you ask of God He will give you wisdom and guide you in the right path, and without His guidance in all things we are sure to err. I am quite sure that if you do seriously and in earnest desire to be fitted for the service of God in His church, papa will do all he can to help you forward."—May 30, 1867.

Among the sterling characteristics inherited from this notable family was "the habit of thinking and acting; the unusual faculty of seeing in the moment a passage through

the rugged reefs of life." It might be said he possessed the wonderful ability to blaze fearlessly a new trail of independent thought and action with an initiative and unexcelled endurance.

He was in Dundas until eight years of age under the superior tutelage and guidance of his earnest parents, where were installed trustworthiness, obedience, and cheerfulness. He was a light-hearted school boy with an engaging personality making for him a host of friends.

In 1866 he entered the school at Weston, Ontario, later Trinity College, where "Old humanities flourished with the new sciences." He was directly under the influence of William A. Johnson and James Bovell, two of the most inspired men of the time.

Up to this time Osler gave no intimation of his ideas and ideals. His parents had selected for him the priesthood, which was natural as his father was a priest and his teachers were priests and naturalists, and science and religion were closely allied. It is said that while Osler was a student in medicine under Bovell he would demonstrate and instruct the classes in Bovell's absence. He lived in the home of this great teacher and, being a favorite student, was treated as a son. It would appear that the natural sciences taught him by Johnson and Bethune, in whose laboratories he worked, became of chief interest to him. Through these and his close friend, Dr. Halford Walker, of Dundas, he decided to study medicine in the Toronto School of Medicine in 1868, thus beginning his fifty-two years of uninterrupted productive activities which have so materially influenced medicine of the world. In 1870 he left Toronto and entered McGill, the school of medicine at Montreal, as a student.

#### *Montreal Period*

Dr. Francis J. Sheppard, writing of him, says, "As I remember him first he was a slim keen-eyed active young fellow, of medium height with rather olive complexion. He was always full of energy, devoted to his microscope, and was always found in the autopsy room or in wards of the hospital. Lectures did not trouble him much. He took

no high place in his classes, but received a special prize for the graduation thesis on account of his great originality."

He had ecclesiastical tendencies, was educated in church schools (High Church School Trinity, a church of England College), and was a divinity student for one year. He was always attentive to his religious duties. Sheppard states: "If he had been born in the twelfth century he would have been a monk and probably a second Hugo, Bishop of Lichfield. He was steeped in the wisdom of Plato, Marcus Aurelius, and Sir Thomas Brown."

Dr. William Osler graduated from McGill in 1872. At once, we are told, he went to Europe for two years of hard work, chiefly in physiology and in pathology, in London, Berlin, and Vienna. He was a great admirer of Virchow, and it is said that Virchow and the German methods inspired him (Osler) to become a clinical teacher of medicine.

In Europe he matured his knowledge of medicine and vastly extended his clinical experience, for he was a diligent student and profited greatly by the opportunities so generously offered him.

In 1874, Dr. Osler returned to Montreal to begin his life work. Dr. A. D. Blockader said of him: "Few physicians have begun their professional careers with a larger fund of energy, natural ability, and acquired knowledge or more perfectly trained powers of critical, careful observation."

Very soon after his return, when only twenty-five years of age, he was elected to the professorship of the Institutes of Medicine at McGill, his alma mater, which consisted of physiology and pathology. And as the Montreal General Hospital held an autopsy on each patient dying in the hospital, as pathologist, this great work fell to Osler.

His effect on the profession was electrical. He at once became the directing influence of the faculty of the Medical School and his elders marveled at his wisdom and his knowledge.

He became secretary of the faculty and registrar of the college. His advice to the incoming student was always one of good

cheer and encouragement. To one of these neophytes he said, "You are taking a step you will never regret; you are doing that which will make your life worth while."

It was characteristic of him to keep his students on the *qui vive* by interspersing a sense of subtle humor in the task given them. On one occasion while performing an autopsy, he removed intestines *en masse*, turned and handed them to a new uninitiated student who was witnessing his first anatomical demonstration, and told him to prepare them for examination. With the aid of the older students, he succeeded. This is a typical Oslerian joke, the underlying motive of which was to test the student's resourcefulness, to observe his initiative ability to handle a new situation.

While in Montreal he was a great student of morbid anatomy and was the first pathologist to the Montreal General Hospital. Here it was that he and his life long friend Dr. George Ross taught medicine, originating the method of causing the student to take an active part in reporting and observing cases. Osler also taught his students to do autopsy work and held practical demonstrations with them. It was his custom to examine the specimens, prepare a written description of them on a copying machine, and present each student with a copy. Think of the extent of this detail work, all because of his interest and untiring efforts in behalf of the student.

Another striking thing that he did in the line of teaching was indeed unique. In 1877 he established a medical society within the student body at McGill, in which the students prepared papers and discussed them as a means of proper training. Sir William never missed one of these, and always closed the meeting with a summary of the evenings work.

As a teacher his happy personality had such a striking effect that he was an inspiration to his pupils, who never missed an opportunity to be present at his lectures. He was always impressive with superior comprehension, combined with natural gentleness, courtesy. He had a striking manner of imparting knowledge, his plan of concise careful and practical observation and his clear method of deducing conclusions made him very

popular as a teacher. It is said that his great stimulus to medicine at McGill "was all the more powerful because of his unselfish, frank, and magnetic character and of his always courteous and gentle manner." As a great friend of the student body, "he infected them with his own enthusiasm and love of science."

In the Medical Faculty with Dr. Osler were his colleagues Drs. Ross, Roddick, Shepherd, MacDonnell and others. He taught physiology and alternated with Dr. Ross in teaching medicine.

He was a great inspiration to the profession at Montreal reviving its interest in medicine and reorganized the Medico-Chirurgical Society of Montreal. It was here that he first demonstrated many specimens which he used in the Gulstonian lectures before the Royal College of Physicians, London, and others referred to in subsequent lectures and in his text book "The Principles and Practices of Medicine."

In Montreal he had an office, but very little practice; he had office hours, but never kept them. He was always to be found in the wards or in the pathological laboratory. He was deeply engrossed in scientific medicine. It is told of him that in consultation with a physician of the old school on a case of typhoid fever which the older physician had not recognized. The old gentleman, said to young Osler. "Young man you talk too much, you have told these people more in fifteen minutes than I have in fifteen years."

These associates observed in him a unique and rare character, one of a most joyous temperament, always thinking the best of every body and of everything, continually making new friends but never forgetting old ones. Every student who visited him in later years never failed to be gladdened by the master addressing him by name. Always gracious, always human, always interested.

Osler was an incessant worker noted for his punctuality and regularity in everything, and he preached "The day should be complete and sufficient within itself." I quote his own words relative to diversion and to work. "As to your method of work, I have a single bit of advice which I give with the earnest conviction of its paramount influence in my success which may have attended my efforts in



life. Take no thought for the morrow; live neither in the past nor in the future, but let each day's work absorb your entire energies and satisfy your widest ambitions . . . While medicine is to be your vocation or calling, see to it that you have also an avocation, some intellectual pastime, which may serve to keep you in touch with the world of art, of science, of letters. Begin at once the cultivation of some interest other than the purely professional. The difficulty is in a selection, and the choice will be different according to your tastes and training; but, no matter what it is, have some outside hobby.

"It seems a bounden duty on such an occasion to be honest and frank, so I propose to tell you the secret of life as I have seen the game played, and as I have tried to play it myself. You remember in one of the Jungle Stories that when Mowgli wished to be avenged on the villagers, he could only get the help of Hathi and his sons by sending them the master word. This I propose to give you in the hope, yes, in the full assurance that some of you, at least, will lay hold on it to your profit. Though a little one, the master word looms large in meaning. It is the open sesame to every portal; the great equalizer in the world; the true philosopher's stone which transmutes all the base metal of humanity into gold. The stupid man among you it will make bright; the bright brilliant, and the brilliant student steady. With the magic word in your heart, all things are possible, and without it all study is vanity and vexation. The miracles of life are with it; the blind see by touch; the deaf hear with eyes; the dumb speak with fingers. To the youth, it brings hope; to the middle-age, confidence; to the aged, repose. True balm of hurt minds, in its presence the heart of the sorrowful is lightened and consoled. It is directly responsible for all advances in medicine during the past twenty-five centuries. Laying hold on it, Hippocrates made observation and science the warp of woof of our art. Galen so read its meaning that fifteen centuries stopped thinking, and slept until awakened by the De Fabrica of Vesalius which is the very incarnation of the master word. With its inspiration Harvey gave an impulse to a larger cir-

culatation than he wot of, an impulse which we feel today. Hunter sounded all its heights and depths and stands out in our history as one of the great exemplars of its virtues. With it, Virchow smote the rock and the waters of progress gushed out; while in the hands of Pasteur, it proved a very talisman to open to us a new heaven in medicine and a new earth in surgery. Not only has it been the touchstone of progress, but it is the measure of success in every day life. Not a man before you but is beholden to it for his position here, while he who addresses you has that honor directly in consequence of having had it graven on his heart when he was as you are today. And the master word is WORK, a little one, as I have said, but fraught with momentous consequences, if you can but write it on the tablets of your hearts and bind it on your foreheads."

It should be noted that in 1878 he returned to London with Dr. George Ross, passed examination for membership in the College of Physicians, London, then spent several months studying at St. Thomas', at University College and at Bartholomews.

Considering a more diverse aspect of his Montreal period, the more human side, I would mention his love of children and their devotion for him. It is said they rushed en masse to greet him, daily interrupting his trip to school. As he danced away they would follow and he would turn and throw them kisses as he went backward down the street. He was, as you see, a great favorite with the children, and was known to them as the "Fairy Prince."

He was known to the students as the "Baby Professor and to his friends as Bill Osler."

Marian Osborne, relates a charming little episode about him which I must tell you. "One day while dancing down the street, for he was too energetic to merely walk, an old man accosted him and asked for money. "Uncle Bill" laughingly said. You old rascal, why should I give you money to drink yourself to death? "Well sir you see it lightens the road going!" There is only one thing of value about you and that is your hob-nail liver. "I'll give it to you Sir, I'll give it to you." Dr. Osler laughed and gave

the man some silver. "Now Jehosaphat, promise me, you will get some soup before you start on the gin." The old fellow agreed and went on his way. Osler watching him remarked, "Pretty cold for that poor old fellow," then he was soon running after him (the begger). "Here take this I have a father of my own," said Dr. Osler, pulling off his overcoat and placing it on the astonished old man. "You may drink yourself to death and undoubtedly will, but I cannot let you freeze to death." "Tell me your name, sir." "William Osler, and don't forget to leave me that liver." Two weeks later the old man died, but before he passed away he made his last will and testament, leaving his hob nail liver and overcoat to Dr. William Osler. She recites the fact that it was a very fortunate thing that the coat was returned as Osler had no means to get another. After sterilizing it he wore it for some time.

Marian Osborne was a frequent companion of Osler. During his early days as professor at McGill, paid him a most laudable tribute, saying that of all men he was "the most Christ like in his life and most God like in his attributes."

Another author, Jean Cameron recites of him that he was "Generous, gracious, magnetic, responsive, attracted to himself all worth knowing, even seeing merit in others and appreciating it when found, at once a discerning companion and a great leader, he more than others has exemplified to me the beauty of friendship, the glory of work, the joy of living. Blockander tells us his reputation as an inspiring teacher, his attractive personality, and his enthusiasm for hard work, became known and appreciated far beyond Montreal, and on the death of William Pepper, he was offered the chair of Clinical Medicine in the University of Pennsylvania. After consultation with his conferees in Montreal, he accepted the offer and left Montreal a rich man, not in worldly goods, for such, as he said to friends on leaving, "I have the misfortune, or the good fortune lightly to esteem but rich in the goods which neither moth nor rust are apt to corrupt, friendship, good fellowship, wider experience and fuller knowledge."

As testimonials of the high esteem in

which he was held at McGill. He was, shortly before leaving elected President of the Canadian Medical Association. A testimonial dinner, worthy of a prince, was given in his honor, and when he departed the students marched to the train in a body to see him off.

No public man ever left Montreal whose departure was more sincerely regretted.

#### *Philadelphia Period*

In Philadelphia as in Montreal he continued to display his wonderful powers as a teacher, employing the splendid system he introduced at McGill. He continued his studies in pathology, the gateway through which he entered medicine. As in Montreal he was the inspiring spirit in the faculty, in the class, in the hospitals, in the library work, and in the Medical Societies. There is no doubt but that he held much affection for the University of Pennsylvania and did much to elevate its standard and in turn this great institution with its wonderful facilities, laboratories, pathological and clinical material increase his knowledge, broadened his views and made more solid the foundation of his reputation.

He was a great devotee to pathology, eliciting the remark from his colleagues that "Osler was an excellent consultant, but the trouble was he could so rarely be found when wanted. He was usually in the autopsy room or working in the wards; rarely ever keeping office hours."

Dr. W. W. Keen speaking of Dr. Osler while in Philadelphia, said "that where ever he went the wheels began to go 'round, things began to be done, and all for the good of the profession and the community. The dry bones as in Ezekiel's Vision gathered themselves together and became imbued with active life. He was the fount of inspiration. His influence extended further and to better purpose than that of any one I have ever known."

As an example of his finer qualities, he wrote from England: that Quaritch has a splendid copy, first edition, of Celsus, which could be had for eighty pounds. He wanted the college to have it and wrote to S. Wier Mitchell, I'll give twenty-five dollars. Can't you bleed the other fellows for the rest. Mitchell phlebotomized the other fellows.

The book now rests in the library at Philadelphia.

Dr. Keen visited Italy in 1907-8 and purchased numerous rare old books. Dr. Osler went to Italy shortly afterwards on the same mission, and wrote Dr. Keen on a post card in large letters "You Pig." Chided him on his large purchase and added "If you come across 'Servetus de Christianismi,' don't buy it. It is not for the like of you to read." In as much as only two copies survived the wrath and torch of John Calvin, the caution was unnecessary.

From this his great interest in libraries is evident. Cicero said, "To add a library to a house is to give the house a soul." He also infused new life into the library at McGill and to it left his priceless library of old books, and his ashes repose with them. He was also a curator of the Bodeian Library at Oxford. To the University of Pennsylvania Library he presented fifty-four books and a Pomander cane.

As evidence of his activity he was for four years a member of the Medical Society in Philadelphia, appeared before it fifty-two times. He published also thirty-nine papers on various subjects. It was just before the Philadelphia period that he delivered the Carwright Lectures, 1883, on "The Physiology of Red Blood Cells," he being the first to study these cells in America. In 1886 he gave the Gulstonian Lectures on Endocarditis.

Of him Dr. Keen says, "He radiated cheerfulness everywhere and that he walked about in an atmosphere of warmth and affection." I quote extracts from a very touching poem by Dr. S. Wier Mitchell of Philadelphia before the Cherako Club, New York City.

*"Books and the Man," William Osler*

"When the years gather round us like stern  
foes

That give no quarter, and the ranks of love  
Break here and there, untouched there still  
abide

Friends whom no adverse fate can wound  
or move."

"Do you per chance recall when first we met  
And gaily winged with thought the flying  
night

And won with ease the friendship of the  
mind

I like to call it friendship at first sight."

"And then you found with us a second home  
And in the practice of life's happiest art  
You little guessed how readily you won  
The added friendship of the open heart."

"And now a score of years has fled away  
In noble service of life's highest ends  
And my glad capture of a London night  
Disputes with me, a continent of friends."

"But you and I may claim an older date  
The fruitful amity of forty years  
A score for me; a score for you, and so  
How simple that arithmetic appears."

"But if the oldest friends are best indeed  
I have the proverb otherwise expressed  
Friends are not best because they're merely  
old

But only old because they proved the best."

At University of Pennsylvania a short time before he left for Baltimore, to the graduating class of 1889, he delivered his valedictory; he said: "Reckling not my own rede, I illustrate the inconsistency which so readily besets us. One might have thought that in the premier school of America, in this Civitas Hyppocratica, with associations so dear to a lover of his profession, with colleagues so distinguished, and with students so considerate, one might have thought, I say that the Hercules Pillars of a man's ambition had been reached. But it has not been so ordained, and today I sever my connection with this university, a stranger, I cannot say an alein, among you, I have been made to feel at home. More you could not have done."

*Baltimore or Hopkins Period*

It was that great mind of medicine, that great organizer and eminent pathologist, now known as the Dean of American Medicine, Dr. William H. Welch, who had the keen discernment to select Dr. William Osler, of Philadelphia and Montreal to fill the high office of Physician in Chief to the newly constructed Johns Hopkins Hospital, Baltimore. It was the year 1889. This the greatest hospital of its time was opened the seventh day



of May of that year with great formality, the ceremony taking place in the Administration Building. There was an exuberant feeling of joy and accomplishment, after twenty years of much thought and arduous labor. Among the notables present were the President, Daniel C. Gilman; the Pathologist, Dr. Wm. H. Welch, and the Physician in Chief, Dr. William Osler. Dr. J. M. T. Finney, recalling the opening, stated there had gathered a "Distinguished assemblage of notable personages, both lay and medical, representing the elite of this country and of Baltimore. Among the prominent figures of those present was one on whom, probably more than any one else were focused the attention and the interest of the assemblage. That man a rather spare figure, below average height, dressed immaculately, debonair, with a flower in the button hole of his Prince Albert, with coal black hair, a little thin over the high forehead, indicative of great intellect, a flowing moustache, bright piercing eyes, in which lurked a most engaging twinkle; a complexion rather sallow yet suggesting good health, with quick agile movement, indicating great nervous energy and altogether giving the impression of a body under excellent control physically, endowed with great mental acumen and poise, and possessed to a marked degree of the sense of humor. This was Dr. William Osler. Such was the birth of the Johns Hopkins Hospital; the Medical School was formed later.

To the alert and preceptive eyes of William Osler this was the great mecca in embryo which he sought with all the essentials of a full life, awaiting the great spirit to develop it, to unfold its inherent possibilities into full fruition. As H. A. Lafleur expresses it, "To blaze a perfectly new road, untrammelled by tradition, vested interest or medical deadwood, best of all backed by a board of management imbued with a fundamental and abiding respect for scientific opinion and commanding an ample budget."

Osler with his cheerful manner and great industry set about to organize the internal workings of this great institution. They stand today a perpetual monument to his ability and discerning foresight.

At first there was some prejudice against

the hospital because the men of power in it were selected outside of Baltimore, and too, the people were superstitious, but Dr. Wm. Osler with his wonderful personality and undoubted sincerity of purpose calmed the opposition and won eternal friendship for the institution; and soon the wards began to fill with patients, interesting cases, if they were not, I am sure Osler made them so.

Among his diversified activities at Hopkins are mentioned the following: Having verified Laverans work on Malaral fever before leaving Montreal Dr. Osler made use of this splendid knowledge to diagnose malarial fever by the microscope. He insisted that quinine should not be given unless malaria is found by the microscope. About this time he was the first to demonstrate the presence of ameba in cases of dysentery in this country, confirming the recent discovery of the ameba by Kartulis in Egypt.

It was also in these early days the first dose of Kochs tuberculin was administered in the United States. It was given at Johns Hopkins in Dr. Osler's Clinic in 1890 with great formality, in the presence of a large audience of prominent masters.

Of it Lafleur says: "The most spectacular of the theater clinics was the occasion of the first administration in the hospital of Kochs tuberculin. A small supply of the precious fluid had been sent to America and distributed to a few well known clinics with specific directions for its use. The executive heads of the hospital, the chiefs of clinics, the house staff, and a large gathering of Baltimore physicians assembled in the amphitheater and after some preliminary historical remarks by Dr. Wm. H. Welch and Dr. Wm. Osler, the writer proceeded to inject subcutaneously into an advanced consumptive, what would now be considered a colossal dose of Old turberculin, and the gathering dispersed with mutual congratulations." In 1891 after less than a year of diligent application and most arduous work, Dr. Osler completed his "Principles and Practice of Medicine." A book so clearly written, its subjects so concisely expressed, that it immediately became the most popular text book in medicine of that day, and the revised editions maintain the popularity of its predecessors.

At Hopkins the magic spell of Osler's influence was remarkable. Following his and the founders original conception of the institution, he, from the beginning, began to plan for a Medical School of a superior type. He and Dr. W. H. Welch associated with them as surgical chief Dr. William Halsted and as gynecological chief Dr. Howard Kelly, and these four formed the nucleus of the Johns Hopkins Medical School and Hospital. Of course Dr. Osler occupied the Chair of Medicine and Dr. Welch that of pathology. The first class began its eventful course in the fall of 1893 and graduated in 1897. It was my good fortune to be the baby member of the class of 1900, the fourth of the so-called banner (or original) classes filling the four years course. When I quietly reflect on that fruitful period of my life under the tutelage of those four mental giants in medicine, I realize that these were the golden years of opportunity. Ah! would that I could live again, if just for a day in that productive period.

In the last two years of the medical course at Hopkins the students were placed in close association with Dr. Osler, during which we found him not only a superb teacher but our close friend, our adviser, our inspiration. All of these characteristics were so intimately intertwined in the associations with him that one can scarcely mention them independently. I agree with Dr. Baker that "there are portions that belong to those more intimate things of life of which one would fain be reticent; that there is half that will never be told."

At Hopkins he put into effect, but with greater scope, the method of teaching he introduced in Montreal and in Philadelphia. In the wards he assigned a certain number of beds to each member of the medical section of the class. This student took the history, made the physical examinations, did all the laboratory work and made chart notes on each case. When the great chief made rounds, which were a great source of pleasure and profit to us, each student had his cases worked up to the minute. It was a great expose of what the student knew, of what he could do, and often of what he could not do. The "Chief" was always considerate and kind, avoided embarrassment and extended encouragement to these embryo physicians, provided

they did not neglect the work. He insisted on attendance at autopsies and reports of them.

As long as I tread this mortal soil there is one association that I shall never forget and it is this, when on the medical section, Dr. Osler would have his students, once a week, to spend a sociable evening at his home. Think of this great and busy man, so interested, so kind, so human as to invite this personal contact with the mere student, the undeveloped neophyte. A cheerful greeting with an appropriate remark to each would come from the "Chief" as we entered. A few pleasantries, or a story or two about some great character in medicine with a lesson to be pressed home, then we were down to business. Seated in comfortable chairs, arranged in a circle, with the chief as pivot man, we awaited with interest, the next procedure. He would take us in order, and without notes would recite every case that each student had in charge, mention the significant features of history, physical examination, laboratory work, treatment, progress, and autopsy, if any. We would sit entranced at his splendid memory, his marvelous insight, his logical conclusions and the interest he exhibited in teaching us in this clever manner. He instructed each, he neglected none. He would bring out in clever fashion, the best that was in us, however small that might have been. In discussing a case it was his habit to excite an interest not only in the patient, but in the disease itself by relating the history of the disease and the names of those intimately connected with its development.

All cases discussed, we would be served with the elements of a Dutch or English supper. Ale was the favorite beverage.

About this time Mrs. Osler would drop in for a moment and remain just long enough to make us feel at home and too, that she had a motherly interest in us.

Following this, the chief would in his charming manner give a delightful talk on some of his favorites, Jenner, Hunter, Laennec, Harvey and others. These little visits to the "Chiefs" hospitable home, giving the most intimate contact with him, are most cherished memories.

He who could not appreciate, not admire,



not work for, not love such a wonderful man, who devoted his whole life's career to his students and to his patients, is not worthy of his calling.

Dr. Thomas Brown says of him: "He preached as he lived, a glorious philosophy of life, a joy in work, doing the day's task, living for the day and the day's work with a wonderful belief in his fellow man. Never losing faith because some had failed him, giving without stint the best to every one, with no thought that some might prove unworthy of the trust.

To those of us who were his students in those early days, his memory is so vivid, so fresh, that it seems but as of yesterday when he worked and played in our midst. We have but to close our eyes to see him in fancy on the Monument Street car, in his laboratory, in the hospital, always in action, always interested in his students."

"In him the fire burned so brightly that no dross or tinsel could survive its pure flame, and he was ever our cloud by day and our pillar of fire by night," always true to himself and others.

An interesting thought appears. In life as years pass, those that we hold highest, those of our greatest admiration and esteem, fade, lose their power, effect a weaker influence, exhaust their resourcefulness, lose their initiative and hence, I say, in late years, develop an exhaustiveness. But not so with Dr. William Osler, the more the association with him the more limitless appears to be his wonderful and varied store of knowledge."

In after years he always maintained a keen and abiding interest in his old students. He never forgot them. We find that he so frequently sent them souvenirs of his writings.

Some of the advice his students received when he perceived them indulging in excesses, for he believed in perpetual training and always keeping fit for one's professional career, might be recalled. He frequently said he did not partake of food that "had the bad taste to disagree" and warned those tending to obesity against "stocking the engines too much." Keep them "clean of ashes and clinkers." To the cigarette fiend he cautioned "Too much companionship with Lady Nicotine" and to the frequent imbibers "fooling

too generously with Bacchus or worst of all with the younger Aphrodite."

Johns Hopkins Hospital is also indebted to William Osler for the Henry Phipps Tuberculosis Clinic. He prevailed upon Mr. Henry Phipps, of New York, to generously donate funds for its development and the City of Baltimore owes him an everlasting debt of gratitude for his active and effective efforts in treatment and control of malarial fever, typhoid fever and tuberculosis. He was the first to arrange an Association of Nurses to visit the tubercular patients in their homes, the forerunner of the great Social Service organizations of today.

In these the most productive years in the life of Dr. Osler he had done so many things worth while, had benefited so many in every walk of life, had so lovingly infused himself into the minds and lives of all, both in and out of Baltimore, that his acceptance of the great honor of Regius Professor of Medicine, Oxford, and his departure from America, were a great sorrow, for he exemplified the most superb principles of physician and man, a great benefactor, a marvelous teacher.

There is no doubt in my mind that it required a great mental struggle and selfsacrifice for him to sever his Baltimore connections, and start life anew in England, and I am sure he felt (to use his own words) "To have striven, to have made an effort, to have been true to certain ideals, that alone is worth the struggle."

Shortly after his election to the Oxford faculty, he asked of a colleague, "Do you think I am sufficiently senile to become a Regius Professor?"

When Osler accepted the Regius Professorship of Medicine at Oxford, England, there was great and universal rejoicing in Europe. All were of the opinion that the wisest choice had been made. He began his career with a very popular procedure, that of holding weekly clinics for undergraduates, and also the same for graduates at the Radcliffe Infirmary, Oxford.

On leaving America for England he wrote to a friend "naturally I am very loath to leave America where I have been so well treated and where I share so many warm friends, but



it is really an act of self preservation, I could not possibly stand for very long the high pressure of my present life. The position is almost academic and I will have an abundance of time for my literary work."

His entrance into the sphere of British medicine produced a magic change at Oxford. Like Montreal, Philadelphia, and Baltimore, he became very popular, immediately inspired his colleagues to more energetic work. He was very active in the Medical Societies and in the fight against tuberculosis. He became much attached to Guys Hospital, London, formerly frequented by his uncle, Dr. Edward Osler, and where were educated James Bovell, Astley Cooper, Addison, and Bright.

It is said men came from all parts of England for his instructions. He made them feel their interests were his interests. Other great teachers had been there before but *no one* with the appealing personality of Osler. As in America, he taught that a correct diagnosis was the important factor, the treatment simple in comparison. His clear, concise and logical deductions, made from history of the cases, cause and effect, and physical examinations, made any case instructive and interesting. He continually advised his students to use the "seeing eye, the hearing ear, the smelling nose, and the understanding mind."

(He was proud of his students, often reviewing their work). He won hosts of friends in England by his dignity, personality, cheerfulness, and sympathy—a cultured gentleman, a profound scholar, an accomplished versatile writer, an unexcelled teacher, an inspiring leader, our "Chief." It was he indeed that became the motive power in British medicine.

His spirit and fairness of mind to all is well illustrated in his keenly worded advice, so often given. "Never believe anything derogatory of a fellow practitioner, even when you know its true.

In spite of the gravity of his work he was always the soul of cheerfulness and good humor, never missing an opportunity for a keen remark, which would turn the joke. In one instance an assistant insisted that he sit on the right side of the open vehicle. He laughed and waived aside the assistant's protest, say-

ing, "Oh, never mind, let the crowd think I am your country cousin."

He was the father of the Association of Physicians of Great Britain and Ireland, 1907.

1904, Doctor of Science, Honoray degree at Oxford given by the British Medical Association.

In 1918 he was President of the Classical Association.

In 1919, President of the Fellowship of Medicine.

Osler was undoubtedly the greatest internist of his time, eminent for his scholarship and professorship.

So sociable, so popular were he and his gracious wife that their home, number 7 Norham Gardens was known as "Osler's Open Arms." There he brought together the physicians of Britain and those of America, hence emanates the observation.

"Who but he would have maintained unabated the same interest in all his old friends, and who else would have turned the ocean into a highway, and his new position, detached as it was, from any vast clinical facilities, into a veritable medical mecca for our American Medical world. What a heritage he has left us wherever he has lived and what blessed new bonds he has created between the three great countries of his residence." (Howard Kelly, at Oxford).

Of his British period Dr. W. S. Thayer says: "In Britain as in America, Osler's charm and brilliancy, his learning and his skill, brought him the same universal affection and respect. He was made a baronet, a deserved honor. His home at Oxford was a mecca for Americans. His hospitality knew no bounds. Frequently forty to fifty guests would gather for afternoon tea.

With all of his teaching, hospital work and writings demanding his time and attention, at the onset of the great war, his advice was sought and he worked industriously to organize the Medical Corps. The greatest tragedy in his life occurred at this time. His only son, Revere, much beloved by his parents, and he on whom Sir William's life was centered, a charming boy of literary attainment, enlisted in the English Army. After a short period in the hospital in France he

went to training camp, joined the Artillery and went to the front. Osler was ever anxious about his boy. "In August, 1917, cruelly wounded, Revere died, tenderly cared for by his friends. This was a crushing blow to the great chief, one from which he never recovered. He heroically tried to preserve the same outward spirit, but it sapped his wonderful vitality and enthusiasm, it inflicted a wound from which he could not recover. His rule in life was to receive with equal mind the gifts and the strifes of fortune. He continued his daily work as before, showed the same keen interest in his friends and the profession, busied himself in his beloved library, adding to its treasures, made his rounds at Radcliffe with the same splendid (outward) spirit. However, his gradual physical decline was observed and notably expressed by the old janitor at the physiological laboratory in a most feeling manner: "No Sir, I don't think Sir William will get better. You see, sir, it is like this. You know how Sir William, mostly on his way down to the hospital of a morning, would drop in for a few minutes to see you and rest. Well in the old days coming in and likewise going out, he always had a word for me. You know his style, sir, like giving a man a cherry dig in the ribs. But now these last months, I have noticed him greeting quite merry like, but in between whiles his face has been grave as though he had something heavy on his mind and has walked in and out without once noticing me. It is Mr. Revere, sir, and Sir William wont get better."

He passed away quietly on December 30, 1919, the victim of pneumonia, the disease he so loved to teach us and which he characterized as "the old man's friend." His ashes, according to his wish, are deposited with his famous library of Old Books at McGill. When all pass in review, the great physicians, those who by their lives, their practice, their teachings, and their writings have exercised the greatest influence over the greatest number of their fellows, putting together all the powers, which make the complete physician, Osler must be awarded the first place." (Adami).

In later years, the handsome memorials in his honor, are mute evidence of the love, af-

fection, and esteem which the world holds for him.

At the University museum, Oxford, we find a large bronze plaque of Osler placed beside the statue of Sydenham.

At the Montreal General Hospital is the Osler Memorial tablet.

At Johns Hopkins Hospital is a memorial portrait Medallion in bronze of Sir. William Osler.

At the Dundas house, where Osler spent his youth, the Hamilton Medical Society of Wentworth County, Ontario, has erected a tablet.

Reflecting on the useful and inspiring life of Sir William Osler, we recall many interesting, many happy, many impressive incidents.

"An idea unique in boldness came to him early, its cultivation allowed his great accomplishments, its diffusion at his hands has produced a remarkable succession of students, who, as a result of his influence, have vigorously assisted in the great forward movement of medicine of today." (Gwyn).

As to Psychotherapy (McCrea) it has been said of him that Sir William Osler was not interested in this method but one might say he did not need to be, he practiced it, not always consciously perhaps but always effectively. He is described as a man of great gentleness, of absolute self control, of genuine human qualities, with a great love for children and the society of refined women. In scientific medicine he was the greatest leader of the past half century. In educational, cultural, and sociological fields, Rogers tells us, he stands preeminently alone—A solitary genius. Every hospital, every laboratory, every medical organization, and every individual physician is better ethically and educationally as a result of his far reaching influence. Every student of medicine today knows Sir Wililam Osler and feels the impulse of his teachings. He realizes that his medical instruction has been bettered by Oslerian standards and methods. Sir William always retained a great affection for the institutions which he had served. He contributed many books and other things to Johns Hopkins and to the University of Pennsylvania, but the greatest gift he ever made was that of his rare and wonderful library of old books which he bequeathed to



McGill and requested that his ashes be deposited with these books, which he treasured so dearly in life—in the McGill Medical Library.

#### *British Period*

His faith in man and his belief in the men of our profession, is exemplified in his words, "Never let your tongue say a slighting word of a colleague. It is not for you to judge. Let not your ears hear the sound of your voice raised in unsound criticism or ridicule or condemnation of a physician. If you do you can never again meet that man face to face. Wait, try to believe the best. Time will generally show that the words you might have spoken, would have been unjust, would have injured a good man and lost you a friend, and then silence is such a wonderful weapon."

Touching our human faults, he addressed a graduating class thus, "Curious odd compounds are these fellow-creatures at whose mercy you will be; full of fads and eccentricities, of whims and fancies; but the more closely we study their little foibles of one sort or another in the inner life which we see, the more surely is the conviction borne in on us of the likeness of their weaknesses to our own. The similarity would be intolerable if a happy egotism did not often render us forgetful of it. Hence the need of an infinite patience and an ever-tender charity towards those fellow-creatures; have they not to exercise the same towards us?"

He further deduces, "The knowledge which a man can use is the only real knowledge which has life and growth in it, and converts itself into practical power. The rest hangs like dust about the brain or dries like rain drops off of the stone."

Osler had a rare literary style and what he said of others may be made to apply to him. "A rare quaintness, a love of odd conceits, and the faculty of apt illustration." A clarity of diction, a charm of expression, an epigrammatic style. Chaplin, the Harveian librarian of the Royal College of Physicians, London, wrote: "It may be doubted if the annals of medical history contain another example of a physician uniting so completely in his intellect a whole hearted veneration of the past in medicine and the keenest enthusiasm of modern medical methods and knowledge."

His mind was permeated with the great Grecians and the great Romans, and he constantly borrowed shafts from their quivers. So conspicuous was this fundamental knowledge that he, a scientific specialist received the extraordinary honor of election to the Presidency of the Association of Classical Teachers of Great Britain in 1917." (Keen).

Of him it can well be said, "The low, the base, the sordid, the mean, the degraded were absent." Nor sun, nor moon, nor stars can shed more light on human kind than one grand life. Since Hippocrates, medicine of all nations has evolved isolated personalities of this kind. Their fingers tower over the centuries and their influence is measured by generations. The like of him we shall never see again.

And thus I have presented to you but a superficial insight, but a faint glow of a brilliant life, a remarkable benefactor of the human race. Yes—the great physician, "the clear voiced apostle of modern medicine." The beloved son of McGill, the sagacious professor of medicine at Pennsylvania, the great teacher and organizer of Johns Hopkins, the cultured Regius Professor of Medicine at Oxford—and the idol of all.

In the last week of his fatal illness, when he of unfailing perception, realized the slowly gathering clouds, the gradual setting of the scarlet sun in the eventide of life, he wrote on a slip of paper and handed it to his devoted wife, who read: "The harbor is almost reached, after a splendid voyage, with such companions all the way, and my boy awaiting me." The spirit of a wonderful man. Osler the great; Osler the magnificent; Osler the invincible.

The author of this article is indebted for information, to "The Life of Sir William Osler" by Dr. Harvey Cushing. "William Osler, Bart," by The Johns Hopkins Press. "Appreciation and Reminiscences of Sir William Osler," by Maude E. Abbott. Councils and Ideals from the writings of Sir William Osler by Camac.

#### OVARIAN HEMORRHAGE

Harry Stuckert, Philadelphia, (Journal A. M. A., April 19, 1930), reviews the literature on ovarian hemorrhage and describes a case of his. He is of the opinion that it is best to operate in all cases of this type, even when the symptoms are mild, as a definite diagnosis cannot be made without laparotomy or the possibility of continued bleeding be estimated.



## PRESIDENT'S REPORT TO THE HOUSE OF DELEGATES\*

WILLIAM R. DANCY, M. D.  
*Savannah*

One year ago you honored me by electing me to the highest office in your association, an honor which I deeply appreciate. Likewise you conferred similar distinctions upon subordinate officers. On all officers are placed certain responsibilities, certain duties, and I feel that you are entitled to know in what manner and to what extent they performed the tasks which were found confronting them.

What is expected of the Medical Association by its membership—which means what is expected of its officers and executive bodies? You expect a good business management of its affairs, an economical and profitable expenditure of its funds, an energetic collection of its dues, the proper running of its splendid Medical Journal, a supervision of its subsidiary organizations, a satisfactory handling of its Medical Defense, an active participation in health program, the education of medical men in the state through university extension methods, the maintenance of the ethics of the profession, the combating of antagonistic legislation, the elevating of the professional standard of medicine, and the arranging of full details of an annual scientific meeting. And each of these have many ramifications, many accessory duties. Your officers, council, committees, and commissioners have labored industriously and faithfully during the past year to measure up to the high standard you have set for them. Judgment relative to the degree of their success or failure attendant upon these efforts rests with you.

At the beginning of the present fiscal year the condition of your Association was good, but it was thought there should be more active interest throughout the state in the Association, that dues were a little slow in being received, and that there was need for

increased membership; that certain legislative matters were in need of help; that the health situation throughout the state required our assistance, and that many routine matters demanded attention.

Your President, appreciating that a year was but a short time in which to make a creditable showing, began his work immediately by making the appointments of the personnel of the committees, commissions, etc., before the close of the convention in Macon. Having served as President-Elect for one year gave him an invaluable insight into this necessity. The memberships of these bodies were promptly notified by the Secretary of their appointments, and within the period of a week they received additional communications from your President, urging active participation in the affairs of the Association as outlined for their respective bodies.

On entering upon the duties of the office of President, a vacancy existed in the Councilorship of the Third District due to the fact that a councilor, Dr. G. Y. Moore, of that district, had been elected to the honored position of President-Elect of your Association. Your President feels that a very happy selection was made in his appointment of Dr. B. T. Wise, of Americus, for the vacancy. During June a second vacancy occurred, this time in the delegates of the American Medical Association. Dr. Allen H. Bunce, who was re-elected as a delegate to the American Medical Association at the last meeting of this Association, was elected by the American Medical Association a trustee of that organization. Inasmuch as an officer of the American Medical Association cannot hold an office in the parent organization and also appear as a delegate to it, there developed the necessity of appointing someone in the place vacated by Dr. Bunce. This your President did by appointing Dr. Bunce's alternate, Dr. O. H. Weaver, of Macon, as delegate. The alternate's position left vacant by the advancement of Dr. Weaver has not been filled because our Association will have the opportunity of selecting an alternate before the American Medical Association meeting.

The by-laws of your Association state that

\*President's report to the House of Delegates, Augusta, Georgia, May 13, 1930.

the President shall visit the subordinate societies in various parts of the state. It is my pleasure to report to you that he has visited each of the district societies, at least once. Three of them he visited twice; one county and one tri-county medical meetings were also attended. In addition to these he was actively engaged at various places during Health Week. On these visits your President was received with distinctive cordiality in every instance and accorded every courtesy. Upon invitation he addressed each of the societies visited, laying stress on the necessity of its loyalty to and support of the parent organization. All of the distinctive objectives of the Association were brought to their attention and discussed. The attendance at all meetings was relatively large. The last district meeting attended was that of the Fourth District. This was a splendid meeting, with an excellent scientific program and a manifestation of renewed interest in the state organization. The President was very much gratified to have the society adopt by resolution his suggestion that the Fourth District meet twice a year.

The medical profession of Georgia has the flower of the state in its membership; finer men you will find no where. Their splendid preparation for their life's work shows their interest in themselves, in their patients, and in the higher sphere of medicine. Today they exhibit, as a whole, a very keen and steadily increasing interest in their Association, believing that organized medicine is essential and is the power which protects the individual physician as well as giving him the prestige of an ethical physician.

In addition to the medical societies visited your President attended two council meetings in Atlanta; three meetings of the Scientific Committee, one in Milledgeville, one in Atlanta, one in Macon; two meetings on Health Education Week in Atlanta; two health meetings, Atlanta and Millen. In visiting the various meetings mentioned it required thirty nights away from home, twenty-five nights were spent in Pullman sleepers and five nights in hotels.

Number miles traveled by train.....	8,006
Number miles traveled by auto.....	2,316
	<hr/> 10,322

His rather extensive traveling was marred by only two accidents, or near accidents. The one serious accident was encountered while returning from Marietta, the Seventh District Medical meeting, via Atlanta to Savannah when the Central Railroad train went into a washout September 26, 1929, resulting in a bad accident and painful injuries to your President. The near accident was when your Secretary and President were driving from Atlanta to Carrollton in April. The former, driving, endeavored to transform his new Ford automobile into an aeroplane, but it became unmanageable and you narrowly escaped having a new set of officers.

During the year the Association, through its officers, has advocated—

The Health Program.

Increased Membership.

Payment of Dues.

Stimulating interest in the Crawford W.

Long Memorial Prize for original work.

Woman's Auxiliary Objective.

Medical Relief in Disaster.

Medical Education for the Graduate in Medicine.

Cancer.

Hospital Organization.

History of Medicine in Georgia.

Health Education Week.

The health program as mapped out by the State Board of Health has been advocated and supported. Your officers and members appeared on their programs in various parts of the state, and co-operated in every way possible.

The legislative program of the State Board of Health, asking for certain funds for its institutions and its maintenance, was heartily supported by us.

It is felt that during the past year through the co-operative efforts of both organizations that the Medical Association of Georgia and the State Board of Health are working in closer unison in health matters for the good of the people of our great state.

The membership during the past year shows a very substantial increase. There was 1,837 paid-up memberships. This leaves only approximately 100 eligible physicians in the state who are not members of this association. This is attributed to the greater activity of the parent organization, reflecting on the district and county societies, so that they have become more active.

The dues, although increased last year, will make but little difference in the paid-up memberships. All physicians seem to appreciate the necessity for the increase, and very little objection has been observed. Your officers in addresses and in circular letters have laid stress upon the necessity for the increase, and it would seem that this has forestalled any marked development of adverse views. Up to the annual session, paid up membership is the largest in the history of the Association.

A splendid effort has been made to encourage men to do original work and place this work in competition for the Crawford W. Long Memorial Prize which is offered for such work, done by a member of this association. It is understood there will be several contestants this year as the result of these efforts on our part.

Lest you forget, may I mention that national legislation seems always to be camping on the trail of the medical profession. The present Congress has under consideration a new narcotic bill, the purpose of which is to place more restrictions on the profession prescribing narcotics, and to charge the physician a fee for registration. This is in addition to the cost and requirements of the Harrison narcotic law. There is also another bill introduced into the National Congress, an antivivisection bill. Both of the bills are being fought by your Association in co-operation with the American Medical Association.

Your organization last year submitted to the Woman's Auxiliary, at its request, a plan for their work, the object of which is known as the Student Educational Fund. The object of this was to advance money to educate in medicine the worthy and well prepared but financially poor Georgia students. They adopted the plan, have worked industriously

and, be it said to their great credit, they have one student already in Emory University Medical School. The Macon Sub-Auxiliary is alone sponsoring another student at the University of Georgia Medical School.

Through the untiring efforts of that indefatigable worker, Mrs. Allen Bunce, past president Woman's Auxiliary, American Medical Association, the same Student Educational Plan has been carried to the auxiliaries of Alabama and Tennessee and both have adopted it.

Medical Relief in Disaster as advocated by the American Medical Association was urged this year and was effectively organized in a large percentage of our county societies.

Through the Bureau of Child Welfare, Department of Labor, Washington, we were able to obtain a post-graduate course in obstetrics for several sections of this state. Funds are available for its continuance this year. The course was given by Dr. J. R. McCord and proved very popular and instructive. Preparations are being made to soon have one or two more such courses in this state.

Concerning cancer, you will hear from the cancer commission what has been done, but it should be said that several spectacular and will-advertised cancer cures were investigated and the public, as well as the physicians, warned so they would not fall victims of misrepresentations of the news articles. Such work is considered a duty of this association.

The Hospital Committee had definite plans and will report its progress.

The Committee on the Medical History of Georgia has been active. The work is necessarily slow. It will make a report. The association was highly commended for having ciation did this with some trepidation. It was highly gratified with the reception, commendation, and reaction that this objective to educate Georgia boys in medicine produced on your membership. It has observed the repeated manifestation of your interest throughout the year, and the realization of your splendid efforts in two striking results. First such a committee, by the Illinois Medical Journal, about November, 1929, which con-



tained a whole column article felicitating the Association on its advanced ideas and spirit of progress.

Health Education Week has just closed and you know its great work. It need not be dwelt upon except to say that its success surpassed expectations. It undoubtedly did much good. You should know, however, that Health Education Week originated with the Medical Association of Georgia. It invited the co-operation of the State Board of Health, Emory University Medical School, University of Georgia Medical School, the University Extension. It required a great amount of work and each of these organizations labored industriously and with a splendid spirit. They were helped very materially by the Woman's Auxiliary, Parent-Teacher Association, and other civic, religious, medical, dental, and other bodies.

As a result of the year's work the following recommendations are submitted for your consideration:

1. That a permanent historian be nominated by the Committee on History or its executive sub-committee, and elected in the usual manner. This historian to immediately begin the writing of the late history of the association. The object of this is to have history written as it is made.

2. That it is not advisable to employ anyone on a salary to solicit membership in this association.

3. That Health Education Week be advocated as an annual procedure.

4. That efforts be made to effect a closer bond between the Medical Association of Georgia and the County and District Societies.

(c) That the District Societies be urged to have two meetings annually.

(d) That the District Societies be requested to name the dates of the meetings and retain the same dates each year, so that a schedule can be arranged. This would better assure the attendance of the officers of the State Association and will also avoid conflicting meetings.

It is felt that the present year has been one of activity and of progress in the Medical Association of Georgia and also in its subordinate district societies.

The officers and membership of the district societies have loyally supported the parent organization, and it is hoped that a still closer union will develop.

It has been a great pleasure and satisfaction to me to have met the personnel of the profession over the state. I shall always cherish their splendid comradeship, cordial hospitality, and scientific attainments.

To the various officers, committees, and commissions of this year's administration I wish to express my thanks for their able assistance and support. Their efforts have been productive of much good. Superb harmony has prevailed throughout the year. There is one, however, to whom this association owes a great debt of gratitude for his enthusiastic and persistent interest and unwavering efforts and work in its behalf. During the past year he has given to your president valuable aid, sane advice, and most loyal, unselfish support. I wish to express my gratitude to my co-worker and our splendid secretary, Dr. Allen H. Bunce. He has indeed been faithful to his trust.

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#### PRESIDENT'S ADDRESS TO THE WOMAN'S AUXILIARY\*

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WILLIAM R. DANCY,† M. D.  
*Savannah*

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Last year, upon your invitation. I presented for your consideration the Student Educational Plan as an objective.

It is a very great pleasure to again address you. This year I come with a greater sense of satisfaction, and with a more profound appreciation of your real value. A year ago the Medical Association of Georgia, through me, in response to your request, suggested an objective for your principal work. The Association of these in the increase in interest in the Auxiliary throughout the state because of the

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\*Address before the Woman's Auxiliary, Augusta, Georgia, May 14, 1930.

†President of the Medical Association of Georgia.

new and appealing incentive, culminating in the organization of more county and district auxiliaries, and secondly the remarkable results of your energetic and enthusiastic work which has placed more or less directly two students in the medical schools, one in Emory School of Medicine and the other in the University (Augusta) Medical School. I wish to most heartily commend and sincerely congratulate you on your accomplishments, and to say to you that whatever doubt, hesitancy, or trepidation existed when the plan of education of the Georgia boy in medicine as your objective was presented, it has been completely effaced. Your splendid progress has more than exceeded expectations. The Medical Association of Georgia glories in your success and is indeed proud of the Woman's Auxiliary. Your work, your lofty ambitions, have created favorable comment beyond the borders of the state, and you are being referred to as the pioneers of good and suitable work among the auxiliaries throughout the United States.

In order to maintain this distinction, you have only to continue your excellent work, well started. However, may I issue a word of caution, just here. To the outside world, present a solid front. If there be any internal differences, work them out to a conclusion within your body. The State Auxiliary, presenting an undivided interest in its objective to the world at large, will make a great impression and a great success. In union there is unlimited power, and you want to be a power. You will then be better able to do something for the local (county or district) auxiliaries. In turn I earnestly appeal to the various sub-auxiliaries to support to the fullest the state organization and do all that is possible to support its objective. If the local auxiliaries desire to enter certain fields of work at home, there can certainly be no objection to it, in addition to their support of the state organization, which latter should always take precedence. It is felt, however, that the local work sooner or later will cause conflict if it be along the same lines as that of the state auxiliary. I would suggest that if the local auxiliaries wish to enter the student education field that they take the high

school boy of good character and superior intelligence who wishes to study medicine and give him the preparatory medical or collegiate course. When this course is completed, this student could be acquired by the state auxiliary and given his medical course. The speaker feels, however, that the pre-medical course or collegiate course would have to be given the boy without expectation that he will repay you for it.

This division or arrangement of the work would allot the preliminary education of the medical student to the local auxiliary and the medical education of him to the state organization, it being understood that the boys, to whom the county auxiliaries give the preliminary education would be taken over by the state organization for the medical course.

You are doing a splendid work; one that is already reflecting great credit on your organization. It is surprising how well it is known all over the state. It is pleasing to notice the number of inquiries in distant cities. The good news has reached us of the excellent work which your Mrs. Allen Bunce, that tireless ex-president of the American Medical Association, has been doing. It is understood that she has presented the "Education of the Youth in Medicine" in such a vivid way to the woman's auxiliaries in Alabama and in Tennessee that both states have adopted the plan first carried out by you. This is a great work and I wish to offer my congratulations to Mrs. Bunce.

While visiting a number of the district medical societies throughout the state this year, it was my pleasure to address the district woman's auxiliaries. I invariably included the "Student Education Plan" in my talk. It created much interest and the women were ready to work for it if only told how to do it, and what was expected of them.

It is hoped that you will pass satisfactory by-laws at this session to cover the full working of the Student Education Plan, that you will adopt a scheme for each auxiliary to contribute a definite amount, and that you will make diligent efforts to acquire substantial donations for the fund.

## FRATERNAL FELLOWSHIP\*

*For the Upbuilding and Advancement of the  
Ancient and Honorable Profession of  
the Practice of Medicine*

G. Y. MOORE,† M. D.  
Cuthbert

The recurrence of this occasion when comrades in one of the greatest professions we are assembled to consult about the advancement of our interest and the general blessings of mankind there is a mighty inspiration and keen pleasure. At the outset I want you fellows to know that I intend to throw my whole heart, strength, and soul into the Medical Association of Georgia.

Perhaps no word could be singled out to convey to your minds the fundamental principles of our organization so well as solidarity. We know how essential it is in social, industrial, political and religious life for every one to stand together and do his part in order to preserve everything of value. I wish to call your attention to some supreme matters which if incorporated in our thinking and conduct will secure for the profession a large place in the affections of the general public.

1. ACQUAINTANCE: The first essential to friendship is acquaintance, and this means more than to shake hands with men and to know their names. Charles Lamb said to get acquainted with men was to like them. My first official work as Councilor was to get acquainted with my secretaries and then the doctors in my district. I deem it just as essential for a Councilor to know his secretaries as it is for the President of the State Association to know his Councilors.

of loyalty. At medical meetings you come in

2. ATTENDANCE: This is an expression contact and share with each other the same things in which you are interested. Any doctor who fails to attend medical meetings and to read the latest medical books and journals will probably get along for a few years and

maintain a fair practice, but he will not recognize up-to-date medicine. If all medical societies should cease to function medical progress would in a short time be halted. The plan we have on organization is sufficient; if carried out with efficiency we should be rid of all envy, jealousy, and hatred. I am convinced that two doctors who are vitally interested and will seriously make the effort can easily perfect and maintain a hundred per cent county society. This effort implies an efficient secretary.

3. FELLOWSHIP, LOYALTY, AND CO-OPERATION: This is the heart of any organization. Nothing can be of more importance in a democratic organization than loyalty. We mix as brothers; we co-operate instead of antagonize. Mutual interest should characterize our every act; the spirit of brotherly love should prevail. It is the gracious gift of human sympathy and understanding that dissolves all differences; it destroys suspicion and hatred and accepts the essential equality and brotherhood of doctors. We would do well to keep before us the following quotation: "The crowning of all good in life's final star, is brotherhood." This thought is properly appraised by Dr. J. N. Hall in an address at Denver when he said,

"The physician who does not associate with his fellows runs the risk of falling into two errors: either he becomes an egotist because he fails to see the good work that others are doing, or, if of a timid nature and faithful in his work, from knowing his own weaknesses so well, he feels that he is immeasurably behind his brothers in the profession. One cannot know where he stands in the race unless he sees those in front of him as well as those in the rear. Let us inculcate into the minds of the young men all that is best of the sacred inheritance which has come to us from the earliest times that they may know the debt we owe to the profession and add something to our store of knowledge of the immensity of this debt.

Let us instill into them ideals so high that they make our occupation, not a mere trade, but what it should be, a liberal profession.

\*Address before the House of Delegates of the Medical Association of Georgia, Augusta, Ga., May 13, 1930.

†President-elect.



and, I thank God, the noblest that is given to the sons of men to follow."

4. THE ECONOMIC VALUE OF ORGANIZATION: Every medical graduate should regard it the highest privilege as well as a genuine pleasure to join his fellows in the true fraternal spirit. We point with pride to the glorious past which emphasizes the fact that all advances since the time of Hyppocrates have been through organized effort. Ours is to uphold the present and do our bit towards paving the way for a more wonderful future. This to me is the most important reason for organization. The benefits are spiritual. The labor is one of love. Our tiny individual contributions will amount to less than one-half of one cent per day. Surely we owe this and much more for the glory and honor of the profession. Seventy-five per cent of the doctors in Georgia and the adjoining states are general practitioners, yet seventy-five per cent of the discussions of papers and discussions at county, district, and state meetings are by specialists. My plea is to do all that is possible to stir up the general practitioner to a renewed interest in medicine. I appeal to you good men to throw off your inferiority complex and determine to do better and to write and talk more about it. Charge better prices and with the money thus obtained equip better offices, and give more time to post-graduate and clinical work. In my humble opinion no greater service can be rendered at the present time than that of teaching our members and prospective members something of the benefits, privileges, and duties of organization. At this point I shall group a few ideas that make for the solidarity and permanency of our organization. You will not consider me presumptuous when I say that ours is purely a democratic one, in which the humblest member from the remotest section of our state may be elevated to the highest office within its gift. We have equal privileges for all and special privileges for none.

The greatest privilege any member can enjoy is that of doing for his fellow practitioners through organization. It is true that the fraternal, spiritual, and educational

advantages outweigh all material consideration, yet we must recognize the fact that our defense against suits for alleged malpractice forms the strongest material reason for membership in the State Association. And, too, our state meetings, meetings of county and district societies, furnish not only scientific information but an opportunity for the renewal of old friendships and the forming of new ones with the men who are on the battle front in active practice doing their part in the world's work.

Special attention is called to our journal, which is for the publication of our transactions, scientific papers, news items, Woman's Auxiliary, and for the interchange of ideas among our members. It should be the link joining us more closely together and keeping us informed as to what is going on in Georgia as well as throughout the world. Thus the individual doctor in the remote section of our state can keep as well informed as his brother in a populous city. Every physician in the practice of medicine owes it to his patients to keep informed of the advances of medicine. I do not mean by this that everything which appears in medical journals should be read. It is, however, essential that the physician familiarize himself with the articles appearing from time to time and that they be discussed in our meetings whenever they promise anything in the advancement of medicine. Everything that is new has to run the gauntlet. What physician would attempt to treat diabetes at the present time without employing insulin, or to treat pernicious anemia without the liver diet. We must read; we owe it to our patients.

The scope of our profession is so extensive and makes such heavy demands upon us that we are in danger often of growing weary in well doing. Notwithstanding this I wish to re-emphasize some of the outstanding needs of the state.

1. A fund provided by the legislature to enable the State Board of Health to assist weaker counties to develop health departments.

2. In view of what has already been accomplished in stamping out malaria, we want

to appeal with all our powers for adequate funds with which to complete in a worthy way the work of malarial control throughout the state.

3. There is an increasing demand for more beds for tuberculosis patients. More than 200 are on the waiting list at Alto. We should act in this matter as quickly as possible and through the proper channels to bring relief to these unfortunates.

4. Through the educational department of our State Board of Health, the people everywhere are being taught that health and efficiency are a financial, social, and moral asset, and that disease and inefficiency are a liability. The tendency of medicine is toward prevention. *We want to prevent disease.* It is undeniable that the loss of life is greatest in the first two years and the work of conservation of human life during this period is of supreme importance. I entertain the hope that we are rapidly approaching the day when periodic health examinations for young and old will receive the emphasis it deserves.

"Many of the world's great ones have suffered on account of the ignorance of their fellowmen. Moses died a fugitive from the Egyptian law. Socrates was sent to his death; the Carpenter of Nazareth was crucified for sins that he never committed; many of his Apostles paid with their lives for their opinions. John Bunyan sent his spiritual messages to us from a jail; yet each of these was tried, I presume, and convicted in a learned, dignified and solemn court, but judges and court officers have been lost in the dust of oblivion. The persecuted and convicted live on. It is wrong to expect too much of a mere mortal. God alone is competent to occupy the judgment seat.

A university was founded by Thomas Jefferson, though many thought him a Godless man, you can see cut deep in Greek letters in stones of one of the great buildings these words: "And you shall know the truth and the truth shall make you free." We can do no better than adopt the Divine saying as our guide.

## ACUTE GONORRHEA IN WOMEN\*

### *Facts and Conditions*

WILLIS P. JORDAN, M. D.

*Columbus*

To the primary presence of the gonococcus in the genitalia and lower urinary tract and the presence of secondary bacteria in the upper urinary tract are due many of the urological conditions. In the discussion of gonorrhea in women it is necessary for us to admit to ourselves frankly, first that the present day knowledge of the practitioner of medicine is the same as that of fifty years ago, and second that our entire treatment is almost as old as that. If possible we are in a worse predicament than were our colleagues of that day, for they did discover the bacteria and grew them. We have learned many things about bacteria since that day but have relatively retrogressed as far as gonorrhea is concerned.

As a disease gonorrhea has existed since the beginning of the history of man. There is every reason to believe that the "running issue" mentioned by Moses is gonorrhea; Hippocrates wrote about it and its treatment and probably gave the disease its name, "flow from the seed". During the middle ages it became so prevalent in Europe that police regulations in the larger European cities required certain prophylactics to be used and examination of prostitutes was instituted. This information may astound some of you who consider yourselves very modern. However their treatment was very crude even compared to ours. The spread of the gonococcus was made more rapid by warring parties of that time until it became universal. It is now a disease of all civilized races, colors, creeds, and classes.

Hunter believed that gonorrhea, chancre, and chancroid were one and the same. Ricord, an American born Frenchman, in 1838 upset this theory, proving their existence as we know them today. Other bacteria had by this been discovered through

\*Read before the Chattahoochee Valley Medical and Surgical Association, Dothan, Alabama, July 9, 10, 1929.

the use of the improved microscope. Neisser in 1879 discovered the coffee bean diplococcus; in 1885 Bumm succeeded in culturing it and producing a reinfection.

In a review of the histology and anatomy of the organs first affected we note the close relationship of the lower urinary and genital organs to the rectum which leads to the possibility of all three being infected together. All three canals pierce the pelvic floor; all three show transition from squamous to specialized columnar epithelium; all three derive their blood supply from the common internal iliac artery; they exhibit submucous venous plexuses; they are supplied by branches of the same nerves:—*nervus erigentes* and hypogastric plexus; all return lymph to the inguinal glands and to the deeper glands along the iliac veins and the aorta. The labia, vulva, and vagina and lower third of the cervix are all covered with stratified squamous epithelium which is exceedingly resistant to the gonococcus due to the nature of its cell bridges and cement substance. The urethra is of specialized columnar type until the vesical portion is reached when transitional epithelium takes its place. Skene's, paraurethral, and Bartholin's glands are all covered with simple columnar epithelium. The upper two thirds of the cervix is covered with ciliated columnar. The bladder, ureters, and kidneys are covered with transitional. Since the parts most usually affected are the urethra with its glands, the Bartholin's glands, and the cervix with its racemose glands we can readily see that the columnar epithelium is the kind or type most easily attacked. For some reason the cuticular layer of columnar epithelium found in other parts of the body is absent or in very little evidence in the genito-urinary tract. Therefore the gonococci can enter at their pleasure, and do so promptly. That is the reason why some people are not so apt to contract the diseases:—their squamous epithelium is more highly developed and runs farther back into the various canals mentioned. Transitional epithelium receives the infection in inverse proportion to its dilatibility except under conditions of trauma, thus it is rare that you have a gonorrheal infection of the kidneys

and bladder, which is also very fortunate. The gonococcus enters from the outside by actual placement and not from self movements; usually but not always the cervix is first infected. Within thirty-six hours after the introduction the bacteria are in the submucosa, there is a phagocytosis, the life cycle of some of the older bacteria is completed and endotoxin is being liberated, the gonococcus does not produce exotoxin. As this occurs there are, of course, local inflammatory changes, beginning as serous exudate which is nature's plan of washing away such living and dead bacteria and endotoxin as possible. The exudate in a few hours contains leucocytes with out bacteria first, then with. There is a relatively small number of gonococci in the pus cells, therefore we know that their whole function has not been carried out. Cross section of stained tissue at this time show an enormous number of the bacteria much deeper in the tissue than the leucocytes. Due to endotoxin, which is a powerful solvent, there is a denudation of epithelium. These denuded areas are then covered as rapidly as possible with keratinized squamous cells which are closely packed. These facts were proven by Bumm and corroborated by others nearly fifty years ago. The inflammatory swelling around the glandular openings may become so great that they will be closed. Their epithelium already infected, they then produce purulent material. Strange to say that if they remain closed they will sterilize themselves. Should they become opened they will be reinfected. In three days the gonococci has penetrated beyond the basement membrane and may have reached as far as the lymphatic system. They then spread themselves both by multiplication and by being carried thru the lymph system. Gonorrhea is a systemic infection and not a strictly localized infection as many believe. Arthritis, endocarditis, myocarditis etc., have their initial beginning at the end of this three days just as often as at a later date. However their severity is lessened by the development of antibodies by the patient. Due to further multiplication, death, and liberation of endotoxin there is a constant exfoliation of epithelium with serous fluid



and a polymorphonuclear leucocytosis, the leucocytes containing dead bacteria. Pain is due to inflammation and irritation of nerve endings. General malaise and fever is due to absorption of toxin.

In the female the disease is preceded by an incubation period of three days. This time may be lengthened or shortened slightly. First symptoms are free serous discharge followed within a few hours by a frequent desire to urinate, with burning on urination. This latter unfortunately for the patient does not last long. If it did last throughout the disease the patient would without a doubt be willing to have herself treated for a time that was satisfactory. However the discharge does not cease, and other symptoms become evident very soon. Another very unfortunate thing about the female is that you usually find her with so many other ills that she does not as a rule pay any attention to minor ones that appear from time to time. Only a little over ten percent have Bartholin gland infection but one hundred percent have Skene gland infection. There is every reason to believe that the uterus and fallopian tubes may become infected very early or just after the first menstrual period; the physiological act of menstruation is conducive to a spread of bacteria. Sexual excitement and sexual intercourse have the same effect. There has never been a satisfactory explanation to the proven fact that indulgence in alcohol has much the same effect as intercourse. I realize that there are patients, particularly men who drink constantly and having had gonorrhea supposedly got well but their pathology is not evident to the eye. Many women develop an immunity to the bacteria with which they are infected and become carriers. They may however be reinfected from the original source of their infection or another.

Torrey and Buckells of Cornell University have made the most exhaustive study of the gonococcus and have been unable to find that there were different strains. The virulence may vary as does the fertility of the field.

It may be like bringing coal to Newcastle, to enumerate the complications of gonorrhea in the female for this is a truly gonorrhea

laden section of a gonorrhea laden world. I do not say this with any reservation for gonorrhea is a disease that like syphilis follows civilization. Writers state that conditions in England, France, Germany are no better if as good as they are here, possibly they may be some better in the little country of Denmark. The Germans have had the best chance to study this disease using convicts for subjects. They have discovered many of the facts I have presented but have not succeeded in the treatment of the disease. The French are just behind them in their research and the English have the advantage of translations of both languages yet with their hordes infected they have not progressed. It is interesting to note that in far away New Zealand and on the continent of Australia that conditions are similar to those in this country. I had wondered if promiscuous sexual intercourse and disease were as prevalent there as here. They of course run hand in hand. A paper written last year in each of those countries would remind you in detail of what might be found in this city, in fact it was necessary in reading them to remember that the writers were not Americans.

Three percent of all females in the United States according to the most ultra conservative estimate have gonorrhea between the ages of eighteen and forty. This means that over eight hundred thousand women are constantly affected, this is constant or on the increase. We know that not less than sixty percent of the males have gonorrhea and that a large number of these never get well, so the work goes on. It is the most prevalent disease in this country next to measles, and with syphilis causes more deaths than tuberculosis, typhoid, cancer or pneumonia. It is the fundamental cause of an untold amount of misery, suffering, loss of time, sterility and ophthalmia neonatorum. This more than three quarters of a million women who are "Damaged Goods", whether they be innocent or not, rob the nation of two million and five hundred thousand children which is its lawful heritage from American citizens. If an epidemic as large as this pandemic were to invade this country the public would be

up in arms, the scientist would burn the midnight oil, the physician would be on the run and something would be done to combat and prevent the severe ravages of the gonococcus of Neisser. This grew on us slowly, insidiously therefore we are at present almost helpless to prevent it. The average physician does not even take the time to study or review the anatomy of the male and female, nor does he consider the pathology. There can be no eradication in one sex without the eradication in the other, God so made man, as he did other animals, that they should have sexual intercourse and while there is such with laxity in education and treatment gonorrhea will spread.

Our Medical Colleges do not give it proper consideration, graduates do not have the elementary principles of a proper conception of the prevalence or treatment of the disease, the ways and means of determining its presence and are not sufficiently interested in its eradication. Most physicians come in contact with gonorrhea in some form every day, but as it is a disease of the privates they treat it as a private matter. The average general practitioner looks on this subject as the old time obstetrician did when he delivered his patients under the cover.

Out of the first four thousand and five hundred patients tabulated in the Columbus City Hospital there were three hundred and fifty, or nine percent, who were women operated upon for a condition caused by gonorrhea. This was a rather high percentage of sterilization as most of them were salpingectomies. Due consideration was paid to removal of salpinx for other reasons. After watching various physicians here, there, and yonder, talking to internes, nurses, and last but not least to the patients themselves I would venture to say that out of the number of women who pass through the average hospital that not three percent have an examination made to determine if gonorrhea is present. After they have been operated upon I wonder how many were told that they were not well merely because they had had their tubes removed or were left to find out for themselves that they would have to go the rounds, perhaps with their ovaries out also,

their glandular system shot to pieces, trying to find relief from their endocervicitis, urethritis etc., blaming sometimes the surgeon for failure to cure when they expected to find permanent relief.

There will be no elaboration on the treatment of the disease but attention is called to the fact that something may be done to alleviate future suffering, with the hope of gaining the interest of the surgeon who includes gynecology in his practice, and the general practitioner who has most of these unfortunates under his care. Those who limit their practice to the branches of medicine and surgery which include gonorrhea do not see half of the patients.

The first and most desirable factor is creating and maintaining an immunity on the part of the patient. The gonorrheal vaccines have no part in the treatment of acute gonorrhea in men or women with one exception:—those cases where complications as arthritis are beginning, vaccines should be administered in small doses, of the pure, not combined vaccine. Beginning with one fourth c.c. and increasing by that amount every other day, three to four doses. Vaccines upset the delicate immunity building powers of the patient as far as gonorrhea is concerned, lower his opsonic index and produce a chronic disease where there was an acute one. Any evident benefit derived from the promiscuous use of vaccines is obtained from the foreign proteins and can best be produced by other products lacking in gonotoxin, as milk or Coley's Fluid, etc. As the gonococci die their gonotoxin is absorbed and as rapidly as possible antitoxins are created but a very delicate balance is maintained and once this interfered with it is difficult to restore. Therefore if not too rashly treated patients develop their own immunity.

Cleanliness is of next importance and is a prime factor; soap and water used freely outside of the genitalia tend to prevent proctitis. Douches should be bland, the over use of phenol derivatives by patients is undoubtedly the cause of much trouble. Tampons have no place in the treatment of either acute or chronic gonorrhea. No medicament is carried into the cervix. There is a blocking or



damming up of the discharge from the cervix. Any vaginal infection is best treated otherwise. A lacrimal needle and hypo syringe make an excellent irrigator for the Skene and Bartholin glands.

Smears may be made from time to time but usually do not become negative under three weeks. Vaginal slides are worse than useless, I mention vaginal slides for reputable physicians are still making them. A cervical smear taken before removing the plug of mucous present is almost as bad.

Rectal gonorrhea though not so prevalent is not uncommon and is very trying to both the patient and the doctor. One dram of ten percent mercurochrome injected into the cleansed rectum with a small syringe alleviates the pain and eventually stops the discharge.

The actual cautery can be used on chronic endocervicitis after the patient is free from gonococci if there is persistent discharge.

The determination of cure is as difficult as the treatment. After all symptoms have subsided, all smears are repeatedly negative from sites of infection smears and cultures should be made monthly for three months just after a menstrual period. The time should then be lengthened to quarterly for a year. Perhaps some day we will be able to employ the gonorrheal complement fixation test with a degree of satisfaction. Examination for cure should also include the urethra for it is not infrequent that urethral strictures develop some months after the disease has passed.

Diathermy is undoubtedly of great value in the treatment but requires time and space as well as knowledge for its use. It is an instrument, and its use cannot be lightly undertaken nor can you expect to place the electrodes, turn on the current in proper quantity for the required length of time and expect to cure the patient. Therefore it is only a very valuable adjunct to the other methods..

300-2 Doctors Building.

## BARRENNESS APPARENTLY DUE TO AZOOSPERMIA\*

DANY Y. SAGE, M. D.

Atlanta

This being a very simple subject, I will deal both plainly and I trust fairly with it. My purpose in reporting these cases is as a reminder to us that such cases do exist and probably always will be found among our patients. Also by thinking of these possibilities and, in the absence of other pathology, there seems to be little, if any, excuse for surgical or other treatment without first considering azoospermia.

Often, since beginning the practice of our profession, I have wondered why certain couples among my acquaintances were childless. A number of these couples have been my patients from time to time. In nearly all such instances, the barrenness of the wife was the chief complaint and, realizing that many of you are coming in contact with similar cases, I am briefly reporting three which were found to fall under the above classification as to condition and cause.

*Case I.*—Mr. X., aged 31, with a responsible clerical job, and his wife aged 30. He had the appearance of lack of sunshine. She was of average good appearance. They had been married eleven years, during which time she had not conceived.

When questioned, he claimed that coitus was indulged in about two or three times a week. When she admitted this, I took it to be a probable truth. The history brought out the fact that Mrs. X. had worn a stem pessary and had been curetted two or more times as well as having received much local treatment and having taken many bottles of patent medicine.

Physical examination showed a well developed female without pelvic pathology, except what appeared to be a slight cervicitis. Quietly explaining this to Mr. X. and getting his promise to bring in a specimen of his semen required only a little effort. Keeping Mrs. X. in the dark about what I was seeking was a little more difficult, but was finally managed.

The specimen, which he brought in fresh a few days later, had no sperm cells whatever. Before advising him of this, I obtained

\*Read before the staff meeting of the Fulton County Medical Society, Atlanta, Ga., February 6, 1930.



his history, which included a severe neisserian infection four years prior to his marriage. He was treated by some advertising "Specialist" whose name he could not or would not divulge. Mr. X. said that both his "testicles rose" and were "punctured" several times by his "Specialist" and that he was likewise treated many months for stricture, until he could borrow no more money with which to pay.

When I informed this man of his condition he became almost wild and threatened everything from libel to mayhem, but he soon calmed down and went his way.

*Case II.*—Mr. and Mrs. Y., both in their early thirties and married about seven years. They grew up in the same neighborhood.

Chief complaint: Both wanted children, were able to provide for them, and had failed to even get a "start that way."

The history disclosed much local treatment, but fortunately little surgery, only one D & C having been performed. After the usual examinations, and failing to find any pelvic pathology, the husband was privately interviewed. He gave a history of a terribly bad time with mumps at age 17 or 18. Two examinations of his fresh semen failed to show a single spermatozoan. He later explained the situation to his wife and they adopted a child, with prospects of continued happiness.

*Case III.*—To me this is the worst type we have to handle. The history in this case is that of a hard-working business man of high intellect and approaching middle age, married to a beautiful woman, aged about 30. His health had not been of the best lately, but he had not thought of taking a vacation or a rest during the first several years of his married life. His wife also had a profession and had been successful and popular in it. No children came and both had worried to the extent that she had a D & C, followed a few months later by a second D & C and a laparotomy, with no history of any pathology being found and only the appendix removed, and all to no apparent purpose. Such was the history when the wife sought my advice.

Physical examination showed no abnormality and I sent for the husband. He was unable to come in due to medical treatment he was taking, which required much of his spare time. However, he was interested, and together he and she agreed to see if the fault could possibly be his. The first fresh specimen of his semen sent in had many sperm cells which looked fairly normal except that a large number were dead. Further examination of the semen, as found in the vagina

and cervix, showed all were dead in the vagina and none reached the cervical canal. How long this weakness of the sperm cells existed of course could not be known.

The husband had suffered with some digestive trouble for years and really was much weaker than he thought, eventually undergoing a long rest cure, with only fair results.

These three cases happen to cover the commonest causes of barrenness due to lack of proper or essential fertilization:

(1) The after results of gonorrheal infection plus unavoidable or meddlesome treatment.

(2) Acute infection other than gonorrhea, carelessly handled mumps being the most active.

(3) That probably large group of cases, the vitality of whose sperm cells has been lowered by causes other than local infection.

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### THE ROLE OF THE PROSTATIC\*

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WALLACE L. BAZEMORE, M. D.

*Macon*

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The individual facing a major operation in the declining years of his life must realize that not too happy a combination confronts him. This is the outlook of the prostatic.

Confronted with this combination the question arises, will this man without an operation outlive his neighbor who submits to operation? If surgical treatment is refused, with what degree of comfort and success may palliative measures be employed?

Catheter life inevitably means infection and death. Occasionally we are confronted with the old buck who carries his catheter about in his pocket, who knows nothing and cares less about sterilization, yet enjoys a bladder free of microbes. But he is the exception. One rarely sees the practice of catheterization carried beyond three years. The tolerance of the catheter and the ease of introduction are probably deciding factors in resulting infection. The urethra that admits a catheter freely avoids trauma, thus lessening the ports of bacterial entrance, but the urethra that admits a catheter easily invites catheterization, a procedure not suited

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\*Read before the Sixth District Medical Society, Griffin, Georgia, December 4, 1929.

to a chronically distended bladder. The normal bladder is quite capable of caring for itself. The bladder of a patient with prostatic disease presents an entirely different picture, that of chronic distension and chronic congestion, which offers a most suitable field for infection. Were the bounds of infection limited to this viscus alone, little fear would be felt for disaster. Unfortunately, such localized infection continues only a short time. Our patient develops chills, fever, loin pains, the inevitable upper urinary tract infection has developed. The hypertrophied prostate, harmless in itself, has changed a well functioning urinary tract into a poorly draining, stagnant, contaminated pool, a factor within itself capable of destroying life.

Having decided upon surgical treatment the question presents itself: "When shall we operate?" This should not wait with the first signs of beginning prostatic hypertrophy. To operate at this time would be to operate before complete adenomatous changes have taken place, before the adenomatous lobes have sufficiently changed to make prostatectomy profitable. Here, as with many other surgical problems, judgment must guide. The outstanding danger signals are increasing residual urine, increasing blood urea, with the necessarily decreasing renal output of solids.

The enlarged prostate does not kill; the resulting back pressure does. The aim of prostatectomy can only be the release of back pressure. A too sudden release of a chronically distended urinary tract entails as many dangers as operation itself. What happened with this sudden release was for a long time not appreciated; now the picture is clear: acute congestion (a most suitable field for infection), partial suppression, uremia, death. Immediately following this release there is even a higher nitrogen retention, even a lower renal output. Slow decompression is therefore necessary to avoid unhappy outcome. Slow decompression with long continuous catheter drainage insures kidney stabilization, a factor essential to successful prostatic operations. The individual whose bladder is chronically distended and whose urethra does not tolerate a retention catheter is unfortunate.

Preparation of these old men for operation is not without its complications. One of the most annoying is epididymitis, which, though not imperiling the patient's life, is certainly distasteful. Routine section of the ductus with ligation previous to instrumentation eliminates this. The annoying urethritis can partially be controlled by frequent change of the catheter. Its removal terminates the urethritis.

The bladder opened, a second stabilization ensues, which is shorter in duration than the first. Previous catheter drainage insures less waiting between cystotomy and prostatectomy. Following this second short adjustment the patient is ready for prostatectomy. The test of renal function is repeated and the nitrogenous products in the blood are measured. When these results are satisfactory the patient is ready for the second operation and not until then. When these preliminary precautions have been taken the removal of the adenomatous prostate is relatively safe.

Let me insist that the removal of an adenomatous prostate does not guarantee its freedom from sclerosis, nor the reverse. To excise a fibrous bladder neck may relieve symptoms, but adenomatous growth may develop a decade later.

When the prostate has been removed, control of hemorrhage is paramount. This is accomplished by ligation, packing or by pressure exerted by a bag distended with fluid. I prefer the latter. It is definite, adjustable, and easily removed. One of the essentials to the comfort and early healing of bladder wounds is dryness. That repugnant urinary odor so displeasing to patient and attendants alike is, as with many other surgical pitfalls, thoroughly eliminated. Suction drainage with a properly adjusted wound tube insures dryness and bladder protection. Supplementing the urethral catheter for the end results guarantees a dry wound from cystotomy to the re-establishment of normal micturition.

I employ routine use of oral antiseptics. Digitalization is practiced before the final operation. Digitalis over a long period of time is condemned. The accumulative effect of digitalis on chronically impaired kidneys will early become marked. I also condemn



the practice of getting your patient out of bed on the third or fourth day. This is not practiced with other major operations. Why practice it with the prostatic patient?

In conclusion, what does a prostatic patient get for all of this? What is his reward? This answer is in the hands of the doctor who first sees the patient as much as it is with the operator. To permit a patient to institute catheterization, with its certain dangers, knowing that such practice is only palliative and that once an established prostatic hypertrophy develops it never subsides, lessens the patient's chances when he reaches the inevitable. Forbid that condition of chronic retention with overflow and by so doing preserve renal reserve. Prostatectomy restores normal urination. We expect the complete emptying of one's bladder. This is the reward of prostatectomy.

I warn here not to overlook the individual who has hypertension nocturia. To promise him nights free of the annoyance of arterial sclerotic polyuria is beyond the accomplishments of prostatectomy.

The once high mortality following this operation has become almost nil. With a further and closer understanding between the patient and the physician we will look for even greater rewards.

## SEROLOGIC NEUROSYPHILIS VERSUS CLINICAL NEUROSYPHILIS\*

N. P. WALKER, M. D.

*Milledgeville*

The parallelism exhibited by the serologic and neurologic findings in neurologic syphilis at the Milledgeville State Hospital is remarkably constant. Much conservatism is observed in making a diagnosis of neurosyphilis unless the data in both fields are positive. In the unusual instances in which there has been a lack of correspondence in the two, time and the subsequent history has cleared up the doubt in practically all cases. Occasionally the neurologic and mental examinations are positive and the serologic is negative or the reverse may be true. Our experience in the

past few years has caused us to be slow in diagnosing paresis in the absence of neurologic and mental symptoms. In doubtful cases it has been found that the neurologic and mental examination is more important than the serologic. We are well aware that this statement is not in accord with the views of some workers who use such terms as asymptomatic paresis and paresis sine paresi. We receive no such patients in this hospital except as they may be incidental to other psychoses. These cases will be referred to later.

The following case illustrates that the neurologic and mental symptoms may be of more importance than the serologic reports:

Case 1.—A man was admitted in August, 1929. The family history was of no significance and the personal history was unreliable on account of dementia. The patient did not understand where he was and claimed that he came to the institution on horseback about two months before the date of admission. His contracted pupils did not react to light, patella reflexes were absent and there was some disturbance of speech and writing. On September 5, his blood and spinal fluid were both entirely normal. September 7, a provocative dose of arsphenamine was given. September 19, his blood Wasserman was strongly positive but his spinal fluid was still negative. October 3, the spinal fluid was again examined. The Wasserman was 3 plus, globulin 3 plus, cells 20 and the colloidal gold curve read 44210000000. On October 17 the spinal fluid showed Wasserman 4 plus, globulin 4 plus, cells 30, colloidal gold 55555432100. The response of the blood and spinal fluid to a provocative dose of arsphenamine is well known and there is nothing very unusual about this case. It is of some interest to note that the blood gave a positive Wassermann reaction twelve days after medication but it was forty days before the spinal fluid was typical of paresis. (The serologic examinations were made at weekly intervals.)

Of a somewhat different type is the following case:

Case 2.—Mr. H. was admitted in September, 1927. He had for a long time used alcohol in excessive amounts and had been given opiates during his last debauch. He stated that he had taken neither alcohol nor drugs for ten days before admission. He had been confused and walked undressed in his hotel corridors. At the time of admission his pupils were moderately dilated and reacted sluggishly to light and

(Continued on Page 216)

### DELEGATES TO THE A. M. A.

Wm. H. Myers, Savannah. Alternate, Wm. A. Mulherin, Augusta.

E. C. Thrash, Atlanta. Alternate, C. W. Roberts, Atlanta.

O. H. Weaver, Macon. Alternate, C. K. Sharp, Arlington.

\*Georgia State Sanitarium.



# THE JOURNAL

OF THE  
MEDICAL ASSOCIATION OF GEORGIA  
Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

MAY, 1930

## HYPERSENSITIVENESS

The season is upon us when many unfortunates will begin to suffer from the allergic diseases. Physicians will be called upon to relieve the annoying symptoms and to cure the disease if possible. Many patients will not be cured because knowledge of hypersensitiveness is still very meagre.

The meaning of the term "allergy" is not well understood by some. Until recent years the term has been employed interchangeably with anaphylaxis. When Von Pirquet and Schick coined the word "allergy" (allos, "altered"; ergia, "reactivity") they had in mind the use of a comprehensive term to cover various manifestations of hypersensitiveness observed in human beings. The editors of the new Journal of Allergy, the first number of which appeared in November 1929, have defined the term allergy as a condition of "specific hypersensitiveness exclusive of anaphylaxis in lower animals."

Although the type of hypersensitiveness which appears spontaneously in human beings is remarkably similar to experimental anaphylaxis in animals, there is a fundamental difference. The term "anaphylaxis" should be restricted to the condition of induced hypersensitiveness produced by definitely antigenic substance. The mechanism of anaphylactic shock depends upon the interaction of a specific antigen-antibody combination. It has been shown that anaphylactic antibodies are not present in the conditions classified as allergic. Immunologically these allergic conditions are characterized by the presence in the blood of a skin sensitizing substance designated by some workers as allergin and by others as reagin. This sensitizing substance is not a true antibody because it is not produced under the stimulation of an antigen.



Dr. WILLIAM R. DANCY  
*Savannah*

*President of the Medical Association of Georgia  
1929-1930.*

Of all allergic diseases in man, hay fever, asthma and certain eczemas are subject to hereditary influences, while others, serum diseases, the tuberculin type of bacterial allergy, dermatitis venenata are not. Coca has given the name "atopy" (atopia, "a strange disease"), to the asthma, hay fever group of diseases. The advisability of classifying as allergic an idiosyncrasy to substances of definite chemical nature is still a moot question.

The relation of allergy to the etiology of disease will be better understood if the postulates of Cooke are followed in searching for the causative factor in a case of hypersensitiveness. These three postulates are as follows: First, a history of individual contact with the suspected substance so that it can act as an etiologic agent; second, the demonstration of sensitization by a positive local reaction, cutaneous, interdermal or ophthalmic; and third, the reproduction at will of the original allergic manifestation upon reintroduction of

the substance, either by inhalation, ingestion or subcutaneous injection.

E. A. BANCKER, JR., M.D.

### POSTGRADUATE INSTRUCTION

At the 1929 session of the Medical Association of Georgia the House of Delegates directed its Committee on Scientific Work to cooperate with the State Board of Health, the Extension Division of the University of Georgia, Emory University School of Medicine and the Medical Department of the University of Georgia to arrange for courses in postgraduate study.

At a meeting of representatives from these bodies, Mr. J. C. Wardlaw, Director of extension work at the University of Georgia was appointed chairman of a sub-committee to work out in detail the proposed courses of study. After overcoming many difficulties, these courses were planned for six leading cities in the State. On account of his unavoidable absence Mr. Wardlaw was unable to give his report to the House of Delegates at the recent Augusta session. However, it was read by the Secretary-Treasurer. The committee has arranged for post graduate courses at Cordele, Bainbridge, Rome, LaGrange, Waycross, and Cornelia. At each of these cities the program which follows will be carried out.

Notices will be mailed to all physicians contingent to these cities in ample time for them to learn of the definite hour and place of meetings.

### PROGRAM FOR POST GRADUATE MEDICAL INSTRUCTION WEEK MEDICAL ASSOCIATION OF GEORGIA

*State Board of Health, University of Georgia,  
and Emory University cooperating.*

#### OUTLINES OF LECTURES

MONDAY—Diagnosis and Care of the Tuberculous—Dr. E. W. Glidden, Superintendent State Tuberculosis Sanatorium.

Mental Hygiene—Mr. Austin E. Edwards, Professor of Psychiatry, University of Georgia.

TUESDAY—Diseases of Children—Dr. W. A. Mulherin, Professor of Pediatrics, University of Georgia.

WEDNESDAY — Pneumonia, Chronic Abdominal Conditions, Diabetes Mellitus—Dr. Cyrus W. Strickler, Professor of Medicine, Emory University.

THURSDAY — Cardio-Renal-Vascular Diseases—Dr. E. E. Murphy, Professor of Internal Medicine, University of Georgia.

FRIDAY—Our Mental Defective Problems—Dr. John W. Oden, Superintendent Training School Mental Defective, Gracewood, Augusta, Georgia.

Your Laboratory and How to Use It—Mr. T. F. Sellers, Director of Laboratory, State Board of Health.

Diagnostic Clinics each day. Bring your cases.

*For tentative schedule see NEWS ITEMS  
this issue of JOURNAL.*

### EMORY ALUMNI CLINICS

Emory Medical Alumni Clinic Week will be held in Atlanta, June 9th to the 13th, inclusive. Registration will take place Monday morning between 8 and 9:30 o'clock in the old College Building on Butler Street for transportation to the campus. The general Alumni meeting will be held in the Theological Building from 11 to 12 o'clock; the Alumni luncheon from 12 to 1 o'clock and; clinics at Wesley Memorial Hospital from 1:30 to 4:30 o'clock. Beginning Tuesday morning and continuing through Friday. Clinics will be held at Grady Hospital from 8 a. m. to 5 p. m. daily. On Thursday evening, June 12, a special program has been arranged at the Academy of Medicine, 38 Prescott Street. On Friday evening there will be the usual Alumni Banquet at which Dr. J. P. Bowdoin will deliver an address.

Come—bring your classmates and friends—let us make this the best Alumni Clinic Week Emory has ever had.

M. C. PRUITT, M.D., *Secretary*,  
420 Mortgage Guarantee Building.

### BIENNIAL NURSING CONVENTION

The Biennial of the three National Nursing organizations will be held in Milwaukee, June 9th to 14th, inclusive. It is anticipated that Georgia will have a large delegation present.

## COFFEY-HUMBER METHOD FOR CANCER

The remarkable publicity accompanying the introduction of the Coffey-Humber method for the treatment of cancer passed briefly into a quiet phase, leaped upward with the eastward jaunt to the congressional hearing, again became quiescent for a few weeks, and burst forth last week in a Sunday supplement feature. In the meantime pathologists, surgeons, and other conosciuti who have investigated the method express nothing but profound disappointment with both the clinical and the pathologic results. These experts indicate that post-mortem examinations, which have been made in at least thirty cases, do not reveal any definite specific destruction of cancer tissue or evidence that the progress of the spread of cancer in the bodies of the afflicted patients has been retarded. Several clinicians who have watched the results closely affirm that the patients have been relieved of pain after the first one or two injections, but that it usually requires more opiate thereafter to control the pain. These observations are obviously what might be anticipated in any new method of treatment of cancer. Perhaps it may not require the five years emphasized by Geschickter as the limit of time for the determination of the virtue of any new method of treatment of cancer to indicate that this method is not what was earnestly hoped for when it was first presented. Should the failure be complete, the disappointment of the profession will be as great as, if not greater than, that of the proponents of the method. — *Jour. A.M.A.*, May 3, 1930.

## OFFICERS OF THE ASSOCIATION 1930-1931

President—G. Y. Moore, Cuthbert.

Others elected at the close of the Augusta session were:

President-Elect—A. G. Fort, Atlanta.

1st Vice-President—Geo. A. Traylor, Augusta.

2nd Vice-President—S. T. R. Revell, Louisville.

Secretary-Treasurer—Allen H. Bunce, Atlanta.

## COUNCILORS

1st District—Wm. H. Myers, Savannah.

2nd District—J. A. Redfearn, Albany.

3rd District—J. C. Patterson, Cuthbert.

4th District—O. W. Roberts, Carrollton.

Eighty-second annual session of the Association will be held in Atlanta, May 12, 13, 14, 15, 1931.

## OFFICIAL CALL

*To the Officers, Fellows, and Members of the American Medical Association:*

The eighty-first annual session of the American Medical Association will be held in Detroit, Mich., from Monday, June 23, to Friday, June 27, 1930.

The House of Delegates will convene on Monday, June 23.

The Scientific Assembly of the association will open with the general meeting held on Tuesday, June 24, at 8:30 p. m.

The various sections of the Scientific Assembly will meet Wednesday, June 25, at 9 a. m. and at 2 p. m. and subsequently according to their respective programs.

MALCOLM L. HARRIS, *President*.

FREDERICK C. WARNSHUIS,

*Speaker, House of Delegates.*

Attest:

OLIN WEST, *Secretary*.

Chicago, Ill., March 15.

## HOUSE OF DELEGATES

The House of Delegates will convene at 10 a. m. on Monday, June 23, 1930, in the banquet hall of the Hotel Statler, Washington Boulevard and Park Avenue.

## REPRESENTATION

The apportionment of delegates made at the Minneapolis session of 1928 entitles your State Association to three delegates for 1929-30-31.

"A member of the House of Delegates must have been a member of the American Medical Association and a Fellow of the Scientific Assembly for at least two years next preceding the session of the House of Delegates at which he is to serve."

"Delegates and alternates from constituent associations shall be elected for two years. Constituent associations entitled to more than one representative shall elect them so that one-half, as near as may be, shall be elected each year. Delegates and alternate elected by the sections, or delegates appointed from the United States Army, United States Navy, and United States Public Health Service shall hold office for two years."—Chap. I, Secs. 1 and 2, By-Laws.

## RULES FOR THE GUIDANCE OF THE COMMITTEE ON CREDENTIALS

*Adopted by the House of Delegates at Atlantic City, N. J., June 6, 1912*

(Continued on Page 208)



## WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

President—Mrs. Marion T. Benson, Atlanta.  
 President-elect—Mrs. Chas. C. Harrold, Macon.  
 1st Vice-President—Mrs. J. A. Selden, Macon.  
 2nd Vice-President—Mrs. H. D. Allen, Sr.,  
 Milledgeville.  
 3rd Vice-President—Mrs. J. A. Redfearn, Albany.  
 Recording Secretary—Mrs. Lee Howard, Savannah.  
 Corresponding Secretary—Mrs. W. H. Garrison,  
 Clarkesville.

Treasurer—Mrs. Chas. E. Waits, Atlanta.  
 Parliamentarian—Mrs. J. E. Penland, Waycross.  
 Editor—Mrs. C. W. Roberts, Atlanta.  
 DELEGATES TO A. M. A. (1930)  
 Mrs. William R. Dancy, Savannah.  
 Mrs. C. C. Hinton, Macon.  
 DELEGATES TO S. M. A., MIAMI  
 Mrs. J. Cox Wall, Eastman.  
 Mrs. Ralston Lattimore, Savannah.

### NATIONAL AUXILIARY

#### *Annual Meeting of A. M. A. in Detroit June 23-27*

Plans for the annual meeting of the National Auxiliary in Detroit, June 23-27, come on apace. The Auxiliary as an organization is occupied only with business affairs and has nothing whatever to do with any social gatherings except the official Auxiliary luncheon. Its members are Mrs. William Gerry Morgan, District of Columbia; Mrs. Olin West, Illinois; Mrs. L. T. Harris, Michigan; Mrs. Walter Jackson Freeman, Pennsylvania, and Mrs. Southgate Leigh, Virginia, Chairman. Mrs. Basil Loren Connelly is Chairman of the Detroit committee for the convention proper, and Mrs. Burt Shurley of the social activities.

The roof garden of the Hotel Tuller, next to the Statler, will be headquarters for all Auxiliary business—registration, meetings, etc., and the Auxiliary luncheon on Tuesday, June 24. There will be no registration fee, but members will buy their own luncheon tickets—\$1.50. The registration bureau will be open Monday, Tuesday, and Wednesday, June 23, 24, 25, from 9-4; Thursday and Friday, June 26, 27, from 9-12. Programs, badges, etc., may all be procured here, and invitation, tickets, and transportation cards must all be procured here in advance as only programs may be procured elsewhere.

No one may represent her state in any capacity whose state dues are not fully paid. The chairman of the Committee on Credentials and Registration is Mrs. Ledru Otway Geib, 3860 St. Clair Avenue, Detroit.

Only delegates may take an active part on the floor of the convention, but alternates should attend all sessions and hold themselves in readiness to take their delegates' places if necessary. All resolutions must be

in writing and signed and in the hands of the committee twenty-four hours before the session at which they are to be presented. Mimeographed copies will be distributed as the delegates take their seats. The chairman of the Committee on Resolutions is Mrs. Augustus S. Kech, 218 Logan Avenue, Altoona, Pennsylvania.

#### MONDAY, JUNE 23, 1930

2:30 P. M.—Meeting of the Board of Directors—Statler Hotel.  
 All state presidents and presidents-elect are asked to time their arrival and stay in Detroit so as to be able to attend the Pre-Convention and Post-Convention Board meetings.

#### TUESDAY, JUNE 24

9:30 A. M.—Registration. Auxiliary Headquarters—Hotel Tuller.  
 9:30 A. M.—Business Meeting.  
 Invocation.  
 Address of Welcome.  
 Response.  
 Report of Committee on Arrangements.  
 Announcements.  
 Report of Entertainment Committee.  
 Adoption of Convention Rules.  
 Minutes of Seventh Annual Meeting.  
 Treasurer's Report.  
 Auditor's Report.  
 President's Report.  
 Committee Reports:  
 Finance. Presentation of the Budget.  
 Printing.  
 Organization.  
 Press and Publicity.  
 Hygeia.  
 Public Relations.  
 Legislation.  
 Program.  
 Revisions.  
 Historian.  
 New Business.

1:00 P. M.—Luncheon, Hotel Tuller Roof Garden.

Speaker will be announced later.

WEDNESDAY, JUNE 25

9:00 A. M.—Registration, Hotel Tuller.

10:00 A. M.—A WORKER'S CONFERENCE.

The Purpose of the Auxiliary.

The National Program.

Analysis of the Work of State Auxiliaries on the Basis of the Official Program of the National Auxiliary. Conducted by Mrs. Evarts V. DePew, assisted by all State Presidents.

This discussion is planned to be a workers' conference in the real sense of the word. The discussion will be interesting and exhilarating to any doctor's wife; but it should be especially valuable to state presidents, presidents-elect, and committee chairmen, and to the corresponding county officers.

Business Meeting Continued.

Unfinished Business.

New Business.

Report of Credentials Committee.

Report of Nominating Committee.

Election of Officers.

Introduction of New Officers.

Adjournment, sine die.

THURSDAY, JUNE 26

Mrs. J. Newton Hunsberger, presiding.

9:00 A. M.—Post Convention Board Meeting.

All State Presidents and Presidents-elect should be at this meeting to assist the incoming president in planning the work of 1930-1931.

10:00 A. M.—Round Table for State Presidents and Committee Chairmen.

Chief Purposes of the State Annual Meeting.

Adequate Preparation for the State Meeting.

Agenda for the State Meeting.

Duties of State Board Members—

Especially of the President and Committee Chairmen.

### OFFICIAL CALL

(Continued from Page 206)

1. Credentials shall be of two parts. The first part shall be sent to the office of the Secretary of the American Medical Association by the Secretary of the constituent association not later than seven days prior to the first day of the first meeting of the House of Delegates, and shall be a list of delegates and alternates for that association. The constituent associations shall designate an alternate for each delegate, who may take the pledge of the delegate when authorized to do so by said delegate in writing. In the absence of such authority, any alternate who has been duly chosen by the constituent asso-

ciation may be seated in place of any delegate who is unable to attend, provided he presents proper official authority from said association. A certificate signed by the President or Secretary of the constituent association shall be deemed legal authority (as amended June 7, 1921).

2. Each delegate shall be furnished with a credential by the Secretary of the association by which he is elected on a prescribed form furnished by the Secretary of the American Medical Association, which shall give the date and term for which he was elected and who was elected to act as alternate for him in case of his inability.

3. A delegate, on presenting himself to the Committee on Credentials, may be seated even though he may not present part 2 of his credentials, provided he is properly identified as the delegate who was elected.

4. No alternate may be seated unless his credentials meet the same requirements as designated for the delegate and he can show written evidence that he is empowered by his delegate to act for him, except as provided for in Section 1 as amended (as amended June 7, 1921).

### SCIENTIFIC ASSEMBLY

The General meeting, which constitutes the opening exercises of the Scientific Assembly of the association, will be held Tuesday evening, June 24, 1930, at 8:30. The Sections will meet on Wednesday, Thursday, and Friday, June 25, 26, and 27, 1930.

*Convening at 9 A. M. the Sections on—*

Surgery, General and Abdominal.

Ophthalmology.

Diseases of Children.

Pharmacology and Therapeutics.

Nervous and Mental Diseases.

Dermatology and Syphilology.

Gastro-Enterology and Proctology.

*Convening at 2 P. M. the Sections on—*

Practice of Medicine.

Obstetrics, Gynecology, and Abdominal

Surgery.

Laryngology, Otology, and Rhinology.

Pathology and Physiology.

Orthopedic Surgery.

Urology.

Radiology.

Preventive and Industrial Medicine and

Public Health.

### REGISTRATION DEPARTMENT

The Registration Department will be open from 8:30 a. m. until 5:30 p. m. on Monday, Tuesday, Wednesday, and Thursday, June 23, 24, 25, and 26, and from 8:30 a. m. to 12:00 noon on Friday, June 27, 1930.

# BOOK REVIEWS AND ABSTRACTS

## BOOK REVIEWS

*Edema and Its Treatment*, by Herman Elwyn, M.D., Assistant Visiting Physician, Gouverneur Hospital, New York City. 182 Pages. Price, \$2.50. New York, The Macmillan Company, 1929.

"The aim of this book is to explain the formation of edema as the consequence of an effort on the part of the organism to maintain the constancy of the internal milieu."

That sentence, from the jacket, sets forth both the excellences and the shortcomings of this book. The author makes plain that edema results from dysfunction of the functional unit made up of the whole mechanism for water exchange.

To this reviewer, at any rate, "effort on the part of the organism" smacks too much of old-fashioned vitalism. At times it seems almost that Dr. Elwyn is endowing the individual cells with central nervous systems and wills of their own to sustain this effort. Although the reviewer readily grants that mechanistic philosophy can not yet explain all simple physiologic processes, he believes that the mechanistic approach to such problems is likely to lead more directly to truth.

The constant re-iteration of the half-French phrase, "internal milieu," also wore upon the reviewer's nerves. If the author had his heart set upon using Claude Bernard's words, he should have gone the whole hog and written "*milieu interieur*." The book is hard to read. This is surprising, for Elwyn's essay on the same subject in the February number of *The American Journal of the Medical Sciences* proves that he can write interestingly.

There is, however, real meat in this volume. Nearly two hundred works, many in German, are cited. The bibliography alone justifies the existence of the book.

The final chapter on the treatment of edema places the treatment upon as rational and scientific a basis as is possible at this time. This chapter should make the book a valuable addition to any physician's library.

—L. M. B.

"*Mental Deficiency (Amentia)*," by A. F. Tredgold, Lecturer on Mental Deficiency, London University. Fifth Edition. 535 pages, with illustrations. Price, \$7.50. New York. Wm. Wood & Co. 1929.

This book remains the best work on mental deficiency. The present edition is larger than previous ones, and has been thoroughly revised. It should be a valuable guide to physicians, particularly pediatricians, and others interested in problems of children and education.

Amentia is defined as a state of incomplete mental development of such a kind and degree that the individual is incapable of adapting himself to the normal environment of his fellows in such a way as to maintain existence independently of supervision, control of external support. With this broad biologic viewpoint,

it is shown that it is fallacious to regard scholastic attainments as the sole criterion of mental deficiency, and mental tests have their chief value in guiding scholastic work. The intelligent quotient by itself is a very imperfect measure, and is said to be valueless and actually misleading for the purpose of differential diagnosis.

Amentia is divided into two large classes, primary and secondary. Primary amentia is inherent, due to a defective germ plasm, and 80% of the cases of mental deficiency belong to this class. Included in this class are those based on a neuropathic inheritance, or alteration of the germ plasm by such factors as lead, alcohol, syphilis and tuberculosis in the parent. Such types are microcephaly, mongolism, diffuse or nodular sclerosis, naevoid, hypertelorism, oxycephaly and progressive cerebral degenerations.

The secondary type accounts for only 20% of the cases, and is due to factors acting on the individual before birth, at birth or after birth. They include traumatic, and inflammatory lesions of the brain hydrocephalus, porencephaly, syphilis, cretinism, other endocrine disorders, nutritional disorders and isolation.

All of the above types are discussed fully from a diagnostic and pathologic standpoint, as well as a psychological standpoint. An interesting discussion is given to the subject of idiots savants, or those cases of mental deficiency with a phenomenal development of one faculty. A very important chapter is given to the discussion of moral defectiveness, which should be read by all those interested in the subject of crime and delinquency.

In regard to preventive measures, it is said that sterilization of defectives will reduce only the small number born of defective parents, and not make any appreciable difference in the total incidence of mental deficiency. Such a measure, by releasing many cases from institutions, would prove a greater cost to the community, than by segregating them in institutions during the reproductive period. This would control the reproduction of neuropathic stocks, to some extent, but for those cases in which the parents are themselves not defective, education or marriage laws to prevent marriage of those of defective stock is the only solution. It must be realized however, that defective stock is being produced right along, by the action of toxic factors on the germ plasm, such as alcohol and syphilis. As far as birth control is concerned, it must reach those of defective stock, and not merely the upper classes.

The treatment of each type of case is also discussed. This great problem of mental deficiency is an important one from a social standpoint and one that the state cannot long afford to neglect.

—WM. A. SMITH, M.D.

*The Nephropathic Effect in Man of a Diet High in Beef Muscle and Liver*, by L. H. Newburgh, Mark



Falcon-Lesses and M. W. Johnston. Am. J. M. Sc. 179: 305-310 (March) 1930.

Newburgh and his co-workers have been studying the effect of a diet high in protein on kidneys for several years. The results of their experiments on rabbits were heavily discounted because the rabbit is essentially a herbivorous animal. Then they studied rats and "showed that rats that lived on diets high in animal tissues (muscle and liver) gradually developed chronic sclerosing kidney disease." The present study was carried out on an apparently normal man, aged 32.

After an observation period of thirty-five days the subject went upon a diet consisting of

Protein	338 Gm.
Fat	271 Gm.
Carbohydrate	96 Gm.

The caloric value of this diet was 4177. The protein was provided as follows:

	Amount eaten	Protein
Fresh beef liver	about 400 Gm.	80 Gm.
Fresh veal round	about 300 Gm.	60 Gm.
Fresh beef tenderloin	about 700 Gm.	164 Gm.
Dried beef	about 100 Gm.	33 Gm.

Due regard was paid to the vitamine content. This diet caused no subjective disturbances. The retinas remained normal. "Of special interest is that the blood pressure was unaffected."

The urine was examined frequently. Albumin first appeared after six weeks, and gradually increased. Casts became more frequent and hyalin casts were largely replaced by granular and cellular casts by the end of the period. The experiment ran from April 10, 1928 to October 22, 1928. By November 2, the urine was normal again. The non-protein nitrogen of the blood was 55.8 mg. July 25; 49.2 mg. October 22, and 35.4 mg. twenty-four hours after return to normal diet.

It has been maintained that Eskimos were not particularly subject to renal disease or hypertension. The only actual statistical figures submitted have been on 142 middle-aged carnivorous Eskimos. Of these 8.5 per cent showed albuminuria and 6 per cent hypertension. The incidence of albuminuria in policy-holders of the Metropolitan Life of the same age group is 2.5 per cent.

No evidence of renal impairment was found in the cases of the two arctic explorers who lived a year on an "exclusive meat diet." As a matter of fact, only 100 to 140 Gm. of protein were eaten daily by these subjects, who derived most of their calories from fat and marrow. Many persons consume an equal amount of animal protein, so it is not surprising that the kidneys of these two men were not injured in one year.

This work is subject to several criticisms:

In the first place, the diet was admittedly abnormal. The non-protein nitrogen, urea-nitrogen and uric acid of the blood were all greater than July 25 than at the end of the experiment in October. It is possible that if the subject had remained on this diet long enough to become thoroughly adjusted to it, the values would have become less.

It may be emphasized that there were no changes in the eye-grounds, no subjective disorders or discomforts, and, in particular, no increase in blood pressure.

Finally, there is increasing evidence that hypertension has its onset earlier in life than we have been accustomed to think. Palmer (J. A. M. A., 94: 694 (March 8) 1930) reports hypertension in slightly more than 10 per cent of otherwise normal Harvard students, whose average age was about 20. If we ignore the selected group who were able to take out life insurance with the Metropolitan and consider only the group of 3,598 boys who were selected only by their desire to go to Harvard, the situation looks different. If 6 per cent of middle-aged Eskimos, who have lived on a carnivorous diet all their life, are hypertensive, and 10 per cent of American boys, who have presumably lived on a good general diet, are hypertensive, is it not logical to argue that an exclusively carnivorous diet is the best method so far discovered for avoiding hypertensive disease?

"Ye shall not live by bread alone" comes to us from the highest authority. "Ye shall not live by meat alone, nor even by inordinate amounts of meat" seems to me the real lesson to be learned from this paper. This reviewer cannot see that the authors have established their point.

—L. M. B.

"*Surgical Pathology*," by William Boyd, Professor of Pathology, University of Manitoba; Pathologist to the Winnipeg General Hospital, Winnipeg, Canada. Second Edition, Saunders, 1929.

This book, as previously printed, consists of two parts; General and Special Pathology, General Pathology dealing with tissue changes ordinarily observed in disease; the section on special Pathology consisting of the Pathological changes of the organs of specialization.

The general arrangement of the chapters is almost identical with the exception of chapter II, which receives a broader application in the title of "The Surgeon and the Laboratory."

The illustrations and colored plates are both improved upon and increased in number, there being in Volume II, 474 splendid illustrations and fifteen colored plates. The Bibliography is most complete and helpful. Many new discussions are added. Prominent medical men are freely quoted. New theories and opinions are also included. Attention is called to the interesting statements on Blastomycosis, Erysipelas, Etiology, Tumors of the Breast, the Gall Bladder and many others.

Chapter I is one of the most delightful written in any medical book. Besides indicating the high ideals of the author and making the fine appeal for better Pathologists and Surgeons, there are many phrases calling attention to important facts in Surgery and Pathology; for instance: "He who prides himself on being a practical surgeon may be ever learning, and never able to come to a knowledge of the truth."

The author has written this book in simple, yet de-

lightful English. The continuity is of an easy flowing style. The treatise is more than just an expression of cold scientific facts; it is a book in which the characters and expressions are made virile and living, interesting and helpful. Witness: "Metchnikoff introduced some rose thorns into this lowly organism, and next morning he had the delight of observing that they were thickly clustered about the wandering cells whose functions he had been trying to determine. In that hour Metchnikoff was transformed from a Zoologist into a Pathologist."

Doctor Boyd has indeed given us a valuable book in a most helpful field of medicine.

JACK C. NORRIS, M.D.

#### BOOKS RECEIVED

*A Treatise of the Diseases and Injuries of the Rectum, Anus and Pelvic Colon*, by J. Rawson Pennington, M. D., F. A. C. S., Proctologist to the Columbus Hospital, Veterans' Hospital No. 30, and United States Marine Hospital; Original member and past president of the American Proctologic Society; Fellow of the Chicago Society of Medical History; Corresponding member, Royal Society of Medicine, London (Surgical Section); formerly Professor of Recta; Diseases, Chicago Polyclinic. Contains 993 pages with 677 illustrations and two plates. Publishers: P. Blakiston's Son & Company, 1012 Walnut Street, Philadelphia.

*Diseases of the Liver, Gall-Bladder and Bile-Ducts*, by Sir Humphrey Rolleson, Bart., K. C. B., M. D., Hon. D. Sc., D. C. L., LL. D., Regius Professor of Physic in the University of Cambridge; Emeritus Physician, St. George's Hospital; sometime President of the Royal College of Physicians of London; and John William McNee, D. S. O., M. D., D. Sc., F. R. C. P., Associate Physician University College Hospital. Illustrated. Third Edition. Publishers: Macmillan & Company, New York.

*The History of Memostasis*, by Samuel Clark Harvey, M. D., Professor of Surgery, Yale University; Surgeon in Chief, New Haven Hospital. Contains 127 pages with 19 illustrations. Publishers: Paul B. Hoeber, Inc., New York. Price \$1.50.

*Materia Medica and Therapeutics for Nurses*, by John A. Foote, M. D., Professor of Pediatrics and one time Assistant Professor of Therapeutics and Materia Medica, Georgetown University School of Medicine, and Instructor in Materia Medica and Therapeutics, Providence Hospital Training School for Nurses. In two parts. *Elementary and Advanced*. Being the Fourth Edition, completely rewritten, reset and rearranged to conform to the Sixth Edition of a curriculum for schools of nursing prepared by National League of Nursing Education. Contains 415 pages with 36 illustrations. Publishers: J. B. Lippincott Company, Philadelphia.

*Research and Medical Progress and other Addresses*, by J. Shelton Horsley, M. D., Attending Surgeon, St. Elizabeth's Hospital, Richmond, Virginia. Contains 208 pages. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Missouri. Price \$2.00.

*Medical Leaders from Hippocrates to Osler*, by Samuel W. Lambert, M. D. and George W. Goodwin, M. D. Illustrated. Contains 329 pages. Publishers: The Bobbs-Merrill Company, Indianapolis.

*Clinical Laboratory Methods*, by Russell Landham Haden, M.A., M.D., Professor of Experimental Medicine, University, Kansas School of Medicine, Kansas City, Kansas. Contains 317 pages, with 69 illustrations and 4 color plates. Third edition. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Missouri. Price, \$5.00.

#### COUNTY AND DISTRICT SOCIETIES COUNTY SOCIETIES 1930 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 5, 1929.
2. Barrow County, Dr. W. L. Mathews, Winder, December 5, 1929.
3. Dougherty County, Dr. I. M. Lucas, Albany, December 28, 1929.
4. Lamar County, Dr. J. M. Rogers, Barnesville, January 6, 1930.
5. Turner County, Dr. J. H. Baxter, Ashburn, February 10, 1930.
6. Monroe County, J. O. Elrod, Forsyth, February 18, 1930.
7. Wayne County, Dr. A. J. Gordon, Jesup, March 20, 1930.
8. Stephens County, Dr. C. L. Ayers, Toccoa, April 2, 1930.
9. Upson County, Dr. R. L. Carter, Thomaston, April 3, 1930.
10. Lowndes County, Dr. Bennett G. Owens, Valdosta, May 5, 1930.

\*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

#### NEW MEMBERS FOR 1930

Bramblett, R. H., Cumming.  
Brim, J. C., Augusta.  
Cail, J. C., Sylvania.  
Dorsey, Homer A., Pitts.  
Easley, Frank, Dalton.  
Gammage, James T., Pineview.  
Googe, William R., Abbeville.  
Hancock, C. R., Atlanta.  
McNeal, F. F., Hahira.  
Redd, S. C., Atlanta.  
Riley, W. M., Louisville, Ky.  
Scoggins, P. T., Commerce.  
Sharpley, H. F., Savannah.

Strickland, J. O., Pembroke.  
 Tribble, P. W., Cumming.  
 Williams, Chas. D., Vidalia.  
 Worthan, A. G., Roopville.

#### COUNTIES REPORTING FOR 1930

##### FRANKLIN COUNTY MEDICAL SOCIETY

Franklin County Medical Society announces the following officers for 1930:

President—Stewart D. Brown, Royston.  
 Secretary-Treasurer—B. T. Smith, Carnesville.  
 Delegate—S. D. Brown, Royston.

##### STEPHENS COUNTY MEDICAL SOCIETY

Stephens County Medical Society announces the following officers for 1930:

President—W. H. Swain, Martin.  
 Vice-President—J. H. Terrell, Toccoa.  
 Secretary-Treasurer—C. L. Ayers, Toccoa.  
 Delegate—J. H. Terrell, Toccoa.  
 Alternate—J. E. D. Isbell, Toccoa.

Censors—J. E. D. Isbell, W. H. Swain and W. B. Heller.

##### UPSON COUNTY MEDICAL SOCIETY

Upson County Medical Society announces the following officers for 1930:

President—D. W. Pritchett, Thomaston.  
 Vice-President—F. M. Woodall, Thomaston.  
 Secretary-Treasurer—R. L. Carter, Thomaston.  
 Delegate—J. M. McKenzie, Thomaston.  
 Alternate—J. E. Garner, Thomaston.  
 Censors—B. L. Bridges, F. M. Woodall and K. S. Williams.

##### LAURENS COUNTY MEDICAL SOCIETY

Laurens County Medical Society announces the following officers for 1930:

President—J. J. Barton, Dublin.  
 Vice-President—C. A. Hodges, Dublin.  
 Secretary-Treasurer—O. H. Cheek, Dublin.  
 Delegate—J. E. New, Dexter.  
 Alternate—J. W. Edmondson, Dublin.  
 Censors—A. T. Coleman, E. B. Claxton and W. C. Thompson.

##### BALDWIN COUNTY MEDICAL SOCIETY

Baldwin County Medical Society announces the following officers for 1930:

President—John W. Mobley, Jr., Milledgeville.  
 Vice-President—C. G. Cox, Milledgeville.  
 Secretary-Treasurer—John D. Wiley, Milledgeville.  
 Delegate—U. S. Bowen, Milledgeville.  
 Alternate—W. M. Scott, Milledgeville.  
 Censors—R. C. Swint, N. P. Walker and W. M. Scott.

##### CRISP COUNTY MEDICAL SOCIETY

Crisp County Medical Society announces the following officers for 1930:

President—Guy G. Lunsford, Cordele.  
 Vice-President—Charles Adams, Cordele.  
 Secretary-Treasurer—J. N. Dorminy, Cordele.  
 Delegate—M. R. Smith, Cordele.

Alternate—P. L. Williams, Cordele.

Censors—V. O. Harvard, W. A. Miller and H. J. Williams.

##### WALTON COUNTY MEDICAL SOCIETY

The Walton County Medical Society announces the following officers for 1930:

President—H. L. Upshaw, Social Circle  
 Vice-President—J. B. H. Day, Social Circle  
 Secretary-Treasurer—J. K. McClintic, Monroe

##### GLYNN COUNTY MEDICAL SOCIETY

The Glynn County Medical Society announces the following officers for 1930:

President—H. L. Akridge, Brunswick  
 Vice-President—H. M. Branham, Brunswick  
 Secretary-Treasurer—F. N. Aldrich, Brunswick  
 Delegate—J. W. Simmons, Brunswick  
 Alternate—Robert S. Burford, Brunswick

##### HANCOCK COUNTY MEDICAL SOCIETY

Hancock County Medical Society announces the following officers for 1930:

President—Horace Darden, Sparta  
 Secretary-Treasurer—H. L. Earl, Sparta  
 Delegate—E. H. Hutchings, Sparta

## FOURTH DISTRICT MEDICAL SOCIETY

APRIL 8, 1930

### *The Fourth District Medical Society Spring Meeting*

The society met at Carrollton, Georgia, at 10 A.M. on April 8, 1930, with Dr. H. J. Goodwyn, Carrollton, President, presiding. Invocation by Rev. C. C. Tooke, Pastor First Baptist Church, Carrollton. Welcome address on the part of the city of Carrollton by T. R. Luck, Mayor. Welcome address for the Carroll County Medical Society by Dr. D. S. Reese, Carrollton. Response to welcome addresses, Dr. Paul Peniston, Sr., Newnan. On motion the privilege of the floor was extended to all visiting physicians.

Scientific papers as follows: "Curability of Cancer," Dr. Enoch Callaway, LaGrange; "Carcinoma of the Colon—Importance of Early Diagnosis," Dr. Allen H. Bunce, Atlanta. These papers discussed by Drs. Roberts, Cook, Clifton, and Bickerstaff; conclusion by Drs. Callaway and Bunce. "Treatment of Ruptured Gastric and Duodenal Ulcers—Motion Pictures," Dr. Hulett H. Asked, Atlanta. Discussion postponed until after lunch. Case of neuritis or paralysis of extensor muscles of the feet and hand presented to the convention by Dr. Barker. Ad-



dress by Dr. William R. Dancy, President Medical Association of Georgia.

Luncheon at Clifton Hotel.

Nominating Committee: Drs. Dexter, Peniston, and Kirby. Following officers nominated: Dr. F. B. Blackmar, Columbus, President; Dr. Enoch Callaway, LaGrange, Vice-President; Dr. W. P. Jordan, Columbus, Secretary-Treasurer; Dr. O. W. Roberts, Carrollton, Councilor. Drs. Blackmar, Callaway, and Jordan elected, and Dr. Roberts' nomination to be certified to the State Association.

On motion, further discussion of papers omitted in the interest of time.

#### *Scientific Program Resumed*

"Treatment of Eclampsia. Review of Recent Advances, Detailed Technique Used, Series of Cases." Dr. H. J. Bickerstaff, Columbus; "Ether Anesthesia, General in Scope." Dr. C. A. Dexter, Columbus; "The Value of Graded or Multiple Stage in Surgery." Dr. Ben H. Clifton, Atlanta; "Treatment of Syphilis. Resume of Recent Advances—Consideration of Adequate Therapy," Dr. W. P. Jordan, Columbus; "Diabetes, General Emphasis on Practical Points and Atypical Cases." Dr. G. J. Dillard, Columbus; "Use of Lipo-Iodine in the Diagnosis of Maxillary Sinus Disease," Dr. F. B. Blackmar, Columbus.

Resolution of sympathy for our brother physicians in their great loss in the recent burning of the Doctors Building, Atlanta, introduced and passed with instructions for Dr. Bunce to carry this message to the unfortunate brethren.

Motion to have a fall meeting carried and the next place of meeting will be Columbus, date to be announced later.

Program completed and no further business the meeting adjourned to meet in Columbus in the early fall.

H. L. BARKER, M. D.,

Acting Secretary-Treasurer.

Carrollton, Ga., April 8, 1930.

#### COMMUNICATIONS

##### SOUTHERN PEDIATRIC SEMINAR

*To the Editor:*

The Commonwealth Fund has again this year given us \$2,000 toward scholarships for the Seminar. This scholarship which we offer pays the tuition of the Doctor and allows him \$30 toward his expenses while attending the Seminar.

We would be glad to have you recommend some doctors to receive these scholarships from your state. We prefer giving these scholarships to men over forty and from towns of under 5,000.

D. LESESNE SMITH, M.D., Registrar.

Spartanburg, S. C., April 25, 1930.

#### INGUINAL HERNIA

*To the Editor:*

The diagnosis of inguinal hernia is ordinarily not difficult. However there are some patients who complain of vague pain on one side of the pubic arch the diagnosis of which is not easy.

A colored girl aged 19 came to the J. J. Gray Clinic (Grady Hospital) complaining of a vague pain in the left lower abdomen which had been present intermittently for the past year, but worse since her marriage four days ago. The pelvic examination was negative.

The right inguinal ring was normal in size. The diameter of the left was approximately 0.5 cm. greater. There was no bulging over this area and the impulse transmitted by coughing was about equal on each side. Believing this a left inguinal hernia but unable to demonstrate it satisfactorily I had the patient repeat her coughs. As she was about to cough in the face of a colleague she was asked to turn her head to one side. This she did and at the same time rotated her shoulders 45 degrees to the right. The next cough caused a bulging 2.5 cms. in diameter immediately over the site of the left inguinal ring, thereby establishing the diagnosis.

This report is submitted to show that by rotating the shoulders from the affected side the muscles of the left inguinal region were relaxed and coughing produced a distinct hernial mass.

M. T. HARRISON, M.D.

Atlanta, Ga., April 12, 1930.

#### ARTICLES ACCEPTED

*To the Editor:*

In addition to the articles enumerated in our letter of March 28, the following have been accepted:

Mead Johnson & Co.

Mead's Dextri-Maltose with Vitamin B.

Parke, Davis & Co.

Ampoules of Pitocin 0.5 cc.

COUNCIL ON PHARMACY AND CHEMISTRY,  
AMERICAN MEDICAL ASSOCIATION.

Chicago, Ill., April 25, 1930.

#### ARTICLES ACCEPTED

*To the Editor:*

In addition to the article enumerated in our letter of February 21, the following have been accepted:

Eli Lilly & Co.

Merthiolate Jelly, Lilly.

Merthiolate Ointment, Lilly.

E. R. Squibb & Sons.

Squibb's Dextro-Vitavose.

Frederick Stearns & Co.

Synephrin.

Synephrin Solution "A".

Ampoules Synephrin-Procaïne, 3 cc.

Hypodermic Tablets Synephrin-Procaïne.

The following article has been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1929, p. 481):

G. D. Searle & Co.

Stable Solution Dextrose and Sodium Chloride (Searle).

COUNCIL ON PHARMACY AND CHEMISTRY,  
AMERICAN MEDICAL ASSOCIATION.  
Chicago, Ill., March 28, 1930.

*To the Editor:*

The third series of the index catalogue of the Surgeon General's Library, of which Volume I was published in 1918, is approaching completion. It is anticipated that the terminal volume of the series will be published about 1931-32. With reference to the assignment and training of personnel for such work, it is necessary to ascertain the feeling of the leading medical organizations and medical schools of the country as to the desirability of continuing this publication through a fourth series.

This catalogue, in its first and second series, is a bibliography of the entire literature of medicine in alphabetical order from the earliest times down to the date of the particular volume containing a particular subject, e.g., Anatomy, Eye (Diseases), Water Supply. The third series, covering literature accumulated from the termination of each volume of the second series down to the appearance of the corresponding volume of the period 1918-26, is largely made up of contemporary literature. In like manner, the fourth series, covering literature accumulating between 1918-26 down to the appearance of the prospective volume, will be made up of medical literature of comparatively recent publication.

THE SURGEON GENERAL, War Dept.  
Washington, D. C., May 6, 1930.

### NEWS ITEMS

Dr. N. M. Owensby, Atlanta, has returned from a six weeks trip in the East. He visited the clinics in New York City, Boston, Philadelphia, Washington and Baltimore. Dr. Owensby attended the annual session of the International Mental Hygiene Congress held in Washington, D. C.

Members of the medical profession are cordially invited to attend and participate in the Southern States Social Hygiene Conference which we are holding in New Orleans from May 23rd through May 27th, 1930, under the auspices of the Louisiana State Board of Health and the New Orleans Council of Social Agencies.

The Southern Pediatric Seminar will hold its tenth annual session at Saluda, North Carolina, July 28th to August 9th. Dr. William A. Mulherin, Augusta, will give lectures on Acute Rheumatic Infections in Children; Lactic Acid Milk; and Preventative Pediatrics. Dr. A. J. Waring, Savannah, will give lectures on Enlarged Thymus and Meningitis. The Seminar gives a post-graduate summer course in methods of diagnosis, prevention and treatment of diseases of children.

The Sixth District Medical Society will hold its summer meeting at Indian Springs on Wednesday, June 25th.

The United States Civil Service Commission announces the following open competitive examination: Applications for associate medical officer (pathology) will be rated as received by the Civil Service Commission at Washington, D. C., until June 30, 1930. The United States Civil Service Commission calls attention to the fact that eligibles are required for filling vacancies in positions of associate medical officer (pathology) in the U. S. Public Health Service, at Ellis Island, N. Y., and Detroit, Mich. The entrance salaries range from \$3,200 to \$3,700 a year. Applicants must have been graduated with the degree of M.D. from a medical school of recognized standing; and, in addition, must have had at least two years of specialized study or practice in human pathology. Full information may be obtained from the United States Civil Service Commission, Washington, D. C., or the Secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city.

Dr. B. H. Minchew, Waycross, was the principal speaker on April 25th at a luncheon meeting of the City Club at the Piedmont Hotel, Atlanta. He made an urgent plea for more adequate support of the State Board of Health and the adoption of the Ellis Health Law in counties where it was not enforced.

The Randolph County Medical Society met at Cuthbert on May 1st. Dr. G. Y. Moore addressed the meeting on the Enlarged Outlook for Medical Organization. Dr. A. L. Crittenden, Shellman, gave Reports of Clinical Cases.

The American Association for the Study of Goiter will hold its annual meeting in Seattle, Washington, July 10-11. At Tacoma, Washington, and Mount Blair on July 12th.

The American College of Physicians will hold its fifteenth annual clinical session at Baltimore, Maryland, from March 23-27, inclusive, 1931. The Lord Baltimore Hotel will be headquarters.

The Spalding County Medical Society met at the Strickland Memorial Hospital, Griffin, on April 16th. Dr. C. F. Griffith entertained the members at dinner. Dr. Floyd McRae, Atlanta, read a paper on Anesthesia; Dr. H. C. Sauls, Atlanta, read a paper entitled Heart Disease.

The Seventh District Medical Society will hold its next meeting at Calhoun in September.

The Eleventh District Medical Society met at Waycross on April 8th. Dr. Jno. F. Denton, Atlanta, read a paper entitled Uterine Cancer; Dr. Floyd McRae, Atlanta, Cancer of the Breast; addresses by Drs. H. G. Huey, Homerville, and T. G. Ritch, Jesup. The fall meeting of the society will be held in Quitman.

Many prominent surgeons of Atlanta are sponsoring the organization of the Southeastern Surgical Congress. Dr. Edgar G. Ballenger has been elected president; Dr. C. W. Roberts, president-elect; Dr. L. C. Fischer, vice-president; Dr. Marion C. Pruitt and

Dr. Dan Y. Sage, members of the Executive Council. It is contemplated in the organization to have its own official publication. The programs for the annual meetings will consist of three parts: first, papers, lantern slides, and moving pictures depicting scientific facts and theories; second, operative and dry clinics; and third, public meetings at which distinguished speakers will give lectures and demonstrations to which the public will be invited.

Dr. and Mrs. H. M. Belflower, Sycamore, entertained the members of the Turner County Medical Society and their wives at a dinner party on April 11th.

The Georgia Medical Society, Savannah (Chatham County), celebrated its 127th anniversary on May 21st. Dr. John B. Deaver, Philadelphia, Professor of Surgery of the University of Pennsylvania School of Medicine, was the principal speaker and guest of honor. In addition to the address by Dr. Deaver, the program consisted of vocal and orchestral music. Hand-some engraved invitations were mailed to the officers of the Medical Association of Georgia and many of the constituent county societies. Dinner was served in the Gold Room of the Hotel DeSoto.

The General Hospital Committee of the Elbert County Hospital, Elberton, entertained the doctors of the city and surrounding community at the Sam Elbert Hotel on April 25th.

The members of the Brooks County Medical Society are sponsoring a meeting on Malaria Control to be held in Quitman on May 29th. Dr. T. F. Abercrombie, Atlanta, Commissioner of Health; Dr. Allen H. Bunce, Atlanta, Secretary-Treasurer of the Association, and Dr. M. E. Winchester, Atlanta, and members of the local society will deliver addresses.

The proposed program for the Post-Graduate Medical Extension work sponsored by the State Board of Health, University of Georgia Medical Department, Emory University School of Medicine, and the constituent county societies co-operating, include the names of the following: Dr. E. W. Glidden, Alto, Superintendent of the State Tuberculosis Sanatorium; Austin S. Edwards, Augusta, Professor of Psychiatry of the University of Georgia Medical Department; Dr. William A. Mulherin, Augusta, Professor of Pediatrics of the University of Georgia Medical Department; Dr. Cyrus W. Strickler, Atlanta, Professor of Medicine of Emory University School of Medicine; Dr. Eugene E. Murphey, Augusta, Professor of Internal Medicine of the University of Georgia Medical Department; Dr. John W. Oden, Gracewood, Superintendent of the Training School for Mental Defectives, and T. F. Sellers, Atlanta, Director of Laboratory of the State Board of Health. Lectures will be delivered by each on his line of work. The tentative schedule for this work follows: Cordele, May 18-23; Bainbridge, May 26-30; Waycross, June 1-5; LaGrange, June 9-13; Cornelia, June 15-20; Rome, June 23-27.

## OBITUARY

*Dr. William Lenwood Harvey*, Bartow; University of Georgia Medical Department, Augusta, 1912; aged 42; died on April 3, 1930. Surviving him are one brother, Will Harvey, Stilson; Mrs. Highsmith of Savannah. Interment was in Alpine cemetery.

*Dr. Thomas J. Moss*, Atlanta; Southern Medical College, Atlanta, 1886; aged 74; died at his home on April 28, 1930. He was a native of Cobb County and had practiced in Mableton and Riverside for many years. Dr. Moss was a member of the Fulton Lodge No. 416 F. & A. M. and the United Liberal Church. Surviving him are his widow, two sons, Harry L. and Dr. Roy Y. Moss. Funeral services were conducted from Harry G. Poole's Chapel and interment in Hollywood cemetery.

*Dr. Herbert Rushin*, Macon; Atlanta School of Medicine, Atlanta, 1906; aged 46; died at his home on March 31, 1930. He was born at Vienna. Dr. Rushin practiced at Abbeville for a number of years, later moving to Macon. Surviving him are one son, Eugene Rushin; three sisters, Mrs. B. M. Tison, Tampa, Florida; Miss Ruth Rushin, Vienna; Mrs. L. W. McKenzie, Montezuma. Interment was in the Vienna cemetery.

## A MESSAGE TO PHYSICIANS

In *The Journal of the American Medical Association* for October 12, 1929, it was announced that the Council on Pharmacy and Chemistry had established a Committee on Foods to examine food products and literature regarding their composition and the claims made in relation to their application and usefulness—all subject to a series of rules, under which the Committee on Foods proposes to operate.

The purpose of the above statement is, first, to acquaint the reader with the above movement in the interest of public health, and second, to advise that Mellin's Food and literature concerned have been considered and that Mellin's Food is accepted by the Committee on Foods and that the Mellin's Food Company is entitled to make use of the "Seal" of the committee.

For a great many years accurate analyses of Mellin's Food and of Mellin's Food as prepared for the feeding of infants and as applied in the management of the diet in illnesses of children and adults have appeared regularly in this publication and in literature placed in the hands of physicians generally.

Notwithstanding the fact that this consistent work with the medical profession had long ago resulted in establishing Mellin's Food as a product of superior quality, it must be gratifying to the Mellin's Food Company to have it all confirmed by a committee acting upon the authority of the American Medical Association.



## SEROLOGIC NEUROSYPHILIS VERSUS CLINICAL NEUROSYPHILIS

(Continued from Page 203)

accommodation. The deep reflexes were somewhat increased. He was very weak and confined to bed. Three days after admission the Wassermann reaction on both blood and spinal fluid was strongly positive: globulin 4 plus and cells 6. The colloidal gold reaction read 12345432100. For two weeks after admission he was too confused to give any account of himself and was constantly subject to hallucinations. When the patient was presented before the staff it was agreed that he should not receive any antisyphilitic treatment until the laboratory examination was repeated. Four weeks later the blood and spinal fluid were negative throughout. After staying in the hospital for a little more than a month he left in good mental state. He had received no antisyphilitic treatment. No explanation is offered for the serologic change. Alcohol or drugs may or may not have had something to do with it.

Case 3.—This was a colored female, admitted August 4, 1929, who had a history of fears and excitement. After admission she showed much confusion which was the outstanding mental symptom. She was very much emaciated and collapse from exhaustion seemed imminent. The neurologic examination was negative except for a slight exaggeration of the patella reflexes. The Wassermann reaction of both blood and spinal fluid was strongly positive: globulin 1 plus, cells 17. The gold solution test read 12344321000. It was agreed that she should be carried over for a while without antisyphilitic treatment. On January 15, 1930, the blood-Wassermann was still strongly positive, but the spinal fluid negative throughout. She had improved physically but was still insane.

There two patients did not receive active antisyphilitic treatment immediately because in recent years we have been mistaken in the prognosis and probably in the diagnosis in the cases of several patients showing serologic syphilis but in whom there were not sufficient neurologic and mental symptoms to make a clinical diagnosis. Two of these may be mentioned.

Case 4.—Mr. Y. was admitted August 21, 1923. On September 6 the Wassermann reaction of his blood was negative but the reaction of his spinal fluid which contained 48 cells, was strongly positive for paresis. After a few doses of arsphenamine, the spinal fluid became negative throughout. His whole career was that of a criminal beginning with petty thefts when he was a boy. At a later age he began to forge checks and deal in whiskey. He was often in conflict with the law and had served one term. He often left the hospital on furlough and at this time is away from the hospital. His physician believes him not to be a true clinical case of paresis.

Case 5.—Mrs. C., admitted August 4, 1924, exhibited no signs of neurologic disease. Her blood and spinal fluid were both 4 plus, globulin 4 plus, cells 192. G. S. 01123100000. After a short interval of treatment the reaction became negative. It is not believed that this was a true clinical case of paresis. She had lead a life of prostitution. She left the hospital in 1926 and when last heard from in 1928 she was in a state institution in a neighboring state.

The ready response to treatment of the Wassermann reaction in the last two cases was in marked contrast to its stubborn resistance in genuine neurosyphilis as seen in paresis.

Much is being written concerning asymptomatic paresis and more recently the term paresis sine paresi has come into use. The striking results achieved in treatment has apparently in some instances at least been in the field of asymptomatic paresis and paresis sine paresi. In a series of 100 cases of paresis treated by malaria reported by O'Leary and Brunsting of Mayo Clinic, thirty-two appear to belong to the above two groups. The author says: "In the former group (asymptomatic paresis) the reactions of the spinal fluid are positive but the patient does not show objective signs of neurosyphilis, whereas in the latter group (paresis sine paresi) the early clinical signs and the persistent serologic reactions of the paretic type are not influenced by treatment." By treatment they appear to mean treatment by means other than malaria. Further they say "The results in this asymptomatic group can be determined only by serological changes." It is believed that those individuals who are doing such work as O'Leary and Brunsting are the benefactors of mental hospitals in that they arrest or prevent the development of paresis of the institutional type. In the Milledgeville State Hospital all the cases of paresis have mental symptoms or else they would not be admitted. Our experience suggests that positive reactions of spinal fluid may change without antisyphilitic treatment. It may be that such findings are due to factors other than syphilis.

### Reference

O'Leary, P. A., and Brunsting, L. A.: The nonspecific Treatment of Neurosyphilis: Fifth Annual Report. *J. A. M. A.* 94: 452 (Feb. 15), 1930.

The Association will hold its eighty-second annual session in Atlanta, May 12, 13, 14, 15, 1931.

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## EDUCATION VERSUS PROMOTION\*

KENNETH M. LYNCH, M. D.

*Professor of Pathology of the Medical College of the State of South Carolina  
Charleston, S. C.*

It is to me of appropriate significance that this meeting is occurring under the eaves of your own State medical school. It is one of my strongest impressions that State medical associations should have as one of their basic reasons for existence a virile interest in medical education and the support of its institutions. Particularly should a State medical association have a very vital interest in and cooperation with a State medical school.

Being myself a medical teacher and institutional worker I am tempted—although I shall not pursue it far—to make some mention of the province of the State in the matter of education in general and of medical education in particular.

The States of which we are citizens are committed to the principle of education of all their people and of the opportunity for special education in certain lines, more particularly the utilitarian professions. They are committed at the same time to the principle of equal opportunity for all and of special privilege for none. These two well-founded principles are in entire accord in a broad conception but may appear at first glance to be in conflict.

It is only of very recent times that the medical profession of this country—except as individuals—has interested itself in the matter of education for education's sake. We have recently made a rather abrupt jump from a condition in medicine of practically no education at all, but a sort of apprentice-

ship training, to one of iron-clad regulation of the time which one considering entering the profession must spend not only in his medical curriculum but in the process of entering it.

Out of the educational troubles in medicine and the question of whether much time should not be saved and at the same time a better product realized has grown an interest on the part of medical educators in general education and we find the medical profession raising some of the most important questions about our procedures in the general educational system.

From the time when our children encounter our educational system they apparently become subject not merely to the average or the majority but to the dominance of the intellectual weakling, so that those who might be capable of making shorter shift of the more or less set curriculum are forced to proceed at the slow gait of their less well-endowed companions and to develop the habit of laziness and time-killing, the destructiveness of which upon inherent ambition and qualities of rapid development are incalculable. This condition is true to a greater or less extent throughout our whole educational series, graded and secondary schools, colleges, and professional schools.

Some educators as well as others are questioning the necessity for the occupation of the full time now commonly occupied in getting the individual through the educational mill and into productive activity.

Others—and I profess to an interest here—are more concerned about the educational principles involved, with the time element important but entirely secondary.

On the basis of belief that all men are not on the same plane intellectually, that some do one thing well and some another, that some are quicker than others; and of

\*Address before a public meeting of the Medical Association of Georgia, Augusta, Ga., May 15, 1930. Invited guest.

the conviction that education does not consist of a mass of collected facts to be mentally swallowed, but of accomplishing the estate of mental maturity and self-government, of a proper sense of relation to one's fellows and to the universe, and of a reasonable measure of proficiency in one's vocation; and on the basis of the advisability of providing the opportunity for individual advancement in accordance with one's inherent qualities, I am much interested in the proposition of better opportunity for the more nearly complete development of leaders, in medical education and in all education. It is leaders that the community, state, nation, and world need to guide best our civilization in the constant and over-increasing turnover of changing conditions.

To turn to the opportunity and obligation of the present occasion—the common denominator which we should strive to reach is one of understanding of what each class of us has in mind about the workings of the other in relation to the modern medical profession. Harmony—that absolute essential to progress—is hardly obtainable without an understanding by any two groups as to what it is the other is trying to do and which is easily accomplished when both have an understanding that the objectives in mind are for the common good.

Suspicion—that mould of stumbling blocks to accomplishment—is bred among sensible people practically only of misunderstanding.

Abroad in the land we see the medical profession throwing open its conferences and inviting an understanding by those who are not medically minded of the things which it is trying to do.

Sometimes it is difficult to separate the chaff from the corn. In the manner of public advertising of the day, when one sees what appears to be an open endorsement of some commercialized medical or pseudomedical measure or appliance by an individual of prominence or supposed prominence in the profession of this country or from Germany or France or England or Italy one is led to pause and wonder about the preservation of

the traditional honesty of the ethics of medicine. When one hears medical propaganda over that tremendously far-reaching thing—the radio—one may have some difficulty differentiating the real from the false. When one reads an inspired article in a current magazine with immodest claims of the members of a reputable medical organization, one may well feel a bit of distaste in his reaction.

The medical profession has been urged by intelligent people to advertise its wares and its principles—to come out of its shell and discard its cloth of secretiveness, and the medical profession is responding, and being new at the business sometimes makes itself ridiculous, foolish, childish. Plainly, the long dignified doctors have trimmed their traditional whiskers and have become juvenile and are playing with a new toy.

At any rate the seclusiveness of medicine is gone—and we have set out to be modern. But let's be more than modern; let's apply the old principles which have never failed, and which will never fail, in a manner of openness; let's not adopt the measures of ten-cent merchandising, of tooth-paste salesmanship. A prominent judge of a high court said to me once, when a doctor ceases to be the oracle in court he becomes worse than useless, he becomes ridiculous. Let's not become ridiculous in our well meant attempt to become modern in our relations with other people.

The organized medical profession of this country, of which this Association is an integral unit, has been called by those who yap at its heels the "Great Medical Trust." I accept that name as a good one—a trust dealing in the basic materials of happiness and prosperity for all people. One of the greatest and most thorough organizations of all time—and yet it is a common expression that doctors have no business sense. One which has as its objective the elimination of diseases as they are encountered. Some would phrase it—the elimination of the doctor's own means of livelihood. That would be in the street sense bad business, and I have heard doctors so small and unintelligent as to so express it. The doctor will never work

himself out of a job, and it seems unnecessary to claim that altruistic intent. He may maneuver his patient past one disease—but only to encounter another. He may bring tuberculosis to its knees but only to run afoul of cancer. He may save the child from scarlet fever, for a useful and happy life, but he may not get him by angina. No, the doctor is not in danger of becoming a public ward—and it is unseemly and unnecessary to claim that as his purpose. We may tackle one problem after the other with that dream of a diseaseless people in our vision, but it remains a dream. Let us keep that dream more to ourselves and brag less about it. Let us make our efforts toward those things to be tackled in the present—and perhaps that dream may come true: who knows?

The organized medical profession has certain organization businesses to attend to, the concrete things of its objectives.

But there is an attribute about which I would speak, of which perhaps some of the medical division of this audience do not often think and which probably occurs but seldom to others.

I ask you to look about, in your communities, your state, your nation and world and find out who are the leaders in the progress of medicine.

They are among those who have unselfishly devoted no small part of their time and energy to medical organization. In medicine, perhaps more than in any other calling, when one runs by himself he inevitably becomes one of those two characters, the bigot, egotist, intolerant of his peers, or that character familiar to us through the newspaper cartoon of the day in the "timid soul", who comes to distrust himself and his own usefulness—both pitiable characters, the first detestable.

I would be the last to claim that membership in organized medicine is always a card of introduction as an honest, capable physician. Unfortunately the ranks of the profession are not free of black sheep. Unfortunately they are difficult to recognize by the layman.

Still more unfortunately, the profession

has not found a means of labeling such physicians so that the unsuspecting layman may know them. As in all walks of life there are unconvicted con men, so in medicine, and it is no source of great wonder that these men commonly appear as prosperous, successful physicians and surgeons. I may even go so far as to say that surgery has been the division of medicine offering the greatest security and, incidentally, the "best pickings" for unscrupulous doctors.

I would that the organized medical profession might devote its main effort toward eliminating and branding those physicians within its own ranks who have no business to be entrusted with the health and happiness of people. Much thought and attention has been given it by medical leaders and they have shown some measure of progress of recent years, but the practical solution has eluded us as yet. It even appears at times that we condone and protect what may be worse than quackery on the part of some of our own accepted associates.

The checks placed about practice in well-regulated hospitals have made it very difficult for surgeons to do unnecessary operating without it coming to the knowledge of their colleagues, but too often when such knowledge is the property of the hospital staff there is where it ends and is buried. There is, as yet, no practical means of penalizing the offender. To give the layman a full measuring device by which he might estimate a doctor has thus far proven most difficult.

The broad measure of membership in regular organized medicine should, at any rate, be fundamental. While there are individual physicians of a reliable and capable kind on the outside, they are scarce enough that they must suffer the penalty of their failure of proper alignment. There is no excuse, much less reason, for a reputable physician to be outside the pale of cooperating with his colleagues.

Napoleon was once asked if he obeyed the Ten Commandments and he said he didn't have to. Some one very pertinently inquired whether he was above or below them. So it is pertinent to inquire if a physician may



be above or below the great principles and ideals of the organized profession.

From time to time the profession becomes excited over the respect apparently given to some current medical quack or quackery by intelligent and even supposedly educated people. It is a curious thing that not infrequently some newly promoted fake of the order succeeds in obtaining the active support of our highest type of people, members of the clergy and educators, and other people who should know how to form judgment.

Occasionally the profession becomes so stirred by such quackery as to be fooled into making an active campaign against it, not stopping to think that opposition becomes, popularly, persecution and that persecution and assumed martyrdom is the fodder upon which it grows fattest.

I never have been impressed with the desirability of entering into any active opposition of any cult. History has shown that quacks with the same old fakes, brought out in new guise, have always been with us and will always be with us, and that the less attention paid to them the less conspicuous they become and the sooner they die—and are replaced by another.

It is a most undignified and undesirable spectacle to see reputable medicine challenging quackery for the possession of prospective patients. If the patient is an intelligent person the light is before him—let him be the judge of his own best interests.

The medical profession is not a public agency of any kind, not an executive authority. Its relations with the public are purely advisory. Its position should be clearly one of giving its best advice on health matters when sought and of offering it, as advice, when it should be sought but is not.

It is a part of the objectives of organized medicine to keep the public informed about the best ways of preserving and reclaiming health. Some call this educating the public. We have preached the necessity of coming early to the surgeon's hands, when he should be consulted, until we have grown a bit tired of the sermon ourselves. We have not promoted the same movement with the internist

to the same extent. Most people wait until they are forced to consult a physician. It is good economy to say nothing of good sense to consult one's physician on the slightest provocation.

Which brings me to the point in which we all have a very concrete and live interest, the economics of illness—as some speak of it, the cost of medical care, or the high cost of medical care.

Economically important as it is, I have not become over-stimulated by the wide interest in the expressed high cost of medical care. To me it is rather the cost of high medical care. The time of conversational and casual examination and diagnosis and of prescription treatment in sickness is gone.

The extent of study which is now a common part of ordinary every-day medicine requires time, material, facilities, and people, and it is bound to cost more. Some one has to pay for it. If one wants the old style of practice done on him he can still get it and at the old price. The trouble is nobody wants that, although occasionally some one—then in excellent health—may profess to.

That conception of the present status of the economics of illness seems to me fundamental.

The medical profession has more to offer than before; the sick should have the advantage of it and naturally desire it, but many people are unable or unwilling to pay its cost.

You cannot long reduce the price of anything below its worth. That is fundamental. When you do you destroy it. Those who deal in it go out of business.

There is much penny-wiseness and pound-foolishness in seeking medical attention and it carries just as heavy penalties as it does in other purchasing and often permanent penalties.

There is some thought that agencies of public medicine — state medicine — as some call it, to scare the doctor—will be the answer to this problem of cost of medical care beyond the ability of some persons to pay.

Public health agencies of all kinds appear to the profession to be encroaching more and more on the practice of medicine.

Offhand, the layman is apt to say, "Why not state medicine, why not clinics operated by the state for all people, at a basic cost?" The answer is that proper medical attention and accomplishment in medical progress are essentially personal and individual. No common agency has ever accomplished personal attention. The practice of machine medicine never could have been productive of what has been accomplished and could now and in the future accomplish still less, in its very nature. Medicine must have the utility of fluidity, not the rigidity of the blue print.

The medical profession fears the spectre of State Medicine—and rightly so—but not for itself. It knows its fundamental destructiveness to the opportunity for accomplishment.

Public medicine must have its feet well on the ground and its head well beneath the clouds.

That is not always truly to be said of public health authorities, who have the common human habit of enlarging their jobs to get more money.

Of recent years conflict between the practicing profession and the health departments as to the limitations of the field of public health has been common. Public money is frequently spent in individual health measures upon people able to pay their own way and not the proper subjects of public charity.

The field of public health—of public medicine—is and should remain properly that of preventive medicine for the collective good of the people concerned. Private medicine is and should remain primarily curative and preventive as concerns the health of individuals. These two principles, when not carefully guarded, sometimes appear to come in conflict. They should not—and public health measures should not reach the point of entering the field of the practice of medicine.

The best interests of public health come from full cooperation, harmony, between the practicing profession and health authorities. This should be kept closely in mind by such authorities.

We in medicine are not always as considerate as we might be of the difficulties

which non-medical people naturally have in forming a correct judgment of anything medical. We are continually provoked by the failure of others to see what seems to us perfectly obvious and unavoidable. When we start out to inform—educate, as some want it—the public on subjects about which they should be informed, let us approach it in a manner not of dogmatism but of proper co-operation and even humility, out of which may grow harmony and not antagonism.

In our dealings with the non-medical public, in our somewhat clumsy efforts to be modern, like other businesses, let us pay our first attention to considerateness, let us have more realism, more truism, and less *said* about our altruism.

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### CANCER OF THE STOMACH\*

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RALPH H. CHANEY, M. D.

*Augusta*

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Cancer of the stomach is a disease due to neoplasm in its wall. It is perniciously progressive and most commonly exists between the ages of forty and seventy and tends to fatal termination without some form of intervention. It is characterized by imperfect gastric function, abdominal distress or pain, loss of appetite, decrease in body weight, weakness, anemia, cachexia, vomiting, and supraumbilical tumor. The gastric extracts or vomitus exhibit deficient emptying power, absence of free hydrochloric acid, altered blood, organic acids, microorganisms and ferments. The stomach contour shows alterations from the normal and defects encroaching into the lumen of the organ.

The incidence of cancer of the stomach is important in considering its therapy, for instance, 73,000 deaths in the United States in 1913 occurred from cancer, of which, 28,500, or thirty-eight per cent, had their primary source in the stomach. These statistics represent an increase of slightly over twenty-three percent in the last ten years. One out of every eighty-nine patients admitted for hospital care is suffering from

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\*Lecture delivered before the third and fourth year classes at the Medical Department of the University of Georgia, Augusta, Ga., January, 1930.

gastric cancer. In relation to the age incidence cancer is more frequent in the sixth decade, eighty-five percent occurring in that period. The extreme limits are variable but apparently the youngest case on record occurred at fifteen and the oldest at ninety-four. The sex incidence varies according to the author from whom we take our statistics. Smithies gives as the ratio that males suffer three times more commonly than females but Mayo-Robson gives the ratio as 4 to 1 in favor of the male and Osler said it occurs five times as frequently in the male. Considering race as a factor cancer is a disease of civilization tho distant peoples are not immune. For instance, Osler gave the incidence in relationship of white to negro as 5 to 1 while Smithies in his report gives the ratio as 3 to 1 in favor of the white which indicates that there has been a decided increase in the incidence of cancer of the stomach among the negroes of the United States. Heredity seems to play some factor but the exact relationship of it is not established. A history of cancer among other relatives exists in 8.5 percent of proved cancer patients. Slye in studies on mice has shown the direct effect of different cancer strains upon successive generations indicating that there is a definite relationship in regard to the incidence of cancer in each generation playing a part in its occurrence in successive generations. Direct transmission of cancer is not commonly held to be possible but mechanical transfer experimentally has been proven and there is a progressive number of incidences where death of second individual from a similar cancer has followed the death of the mate. Considering the social status there is evidence to show that abundance favors the development of cancer, the incidence being higher in the overfed and the underworked. The incidence in the cancer age is also greater among individuals who are overweight. Occupation and habits apparently have no real influence upon the incidence of cancer. Trauma long continued of internal type such as is manifest in recent experiments reported by Morton which show that hair and food particles frequently are driven into the base of ulcers so deeply as to be difficult of removal, indicate that

such trauma may be a direct factor in the development of cancer. External trauma occurs in the history of 1.5 percent of individuals harboring cancer. Previous disease manifested under the varying terms such as nervous stomach, indigestion, dyspepsia, and catarrh occurred as previous factors in 22 percent of 150 cases reported by Osler and were present for a period of more than one year prior to the development of the symptoms bearing on the cancer itself. Indigestion as a prodromal symptom existed in 60 percent of nine hundred and twenty-one cases reported by Smithies. Thirty-two percent of cancer occurs in individuals apparently sound until the rise of the first symptom. Warthin believes that gastric syphilis is the frequent antecedent process and that many luetic lesions have been miscalled cancer.

Cancer of the stomach may rise in or subsequent to ulcer of the stomach. The relationship was first noted in 1839 by Cruveilhier tho Dittrich first studied the relationship in 1848. Controversy still exists at the present time, MacCarthy and Wilson demonstrating cancer changes in as high as 70 percent of ulcers and Smithies showing a long history to exist suggestive of ulcer in 60 percent, while Dible is able to prove pre-existing ulcer present in only 5 percent of proved cancer lesions. This low percentage or variance from that reported by other authors may be due to the fact that Dible does not take the various downgrowths of epithelium near the edge of the lesion to indicate malignancy, feeling that these changes represent only a part of the distortion of the tissues which occurs with healing, the epithelium growing readily and tending to fill in the crevices where the muscle is destroyed and not regenerated. In Dible's 126 cases of ulcer thirty-two showed such change not considered malignant. If such changes indicate malignancy, contrary to the view of Dible, his investigation shows a frequency of malignancy that almost reaches the ratio found by American authors. In pointing out the factors which are necessary to determine preexistent ulcer in definite cancer cases, Dible finds that 96 percent of ulcers show destruction of the muscle at the base and



that endarteritis also is common in the vicinity of ulcer. Thus, muscle destruction, endarteritis, and vascular thrombosis are taken to indicate ulcer. Chronic ulcer destroys the muscle wall "in toto" in almost every instance while cancer may or may not do this. When the muscle can be traced as a solid band thru the entire base of the tumor the evidence is against ulcer. Endarteritis may be present in cancer but its absence is strong evidence against a previous ulcer. Fibrosis in association with cancer may be interpreted as evidence of ulcer only when it is free from malignant cells. Thus in 33 cases of cancer examined by Dible, nineteen showed no evidence of preexisting ulcer, nine showed the weight of evidence against preexisting ulcer, five suggested preexistent ulcer on the histology alone, and two gave the long history characteristic of ulcer. From this series Dible draws the conclusion that only two out of 33 cases of cancer showed the evidence clinically and histologically pointing to preexisting ulcer. This contention is at variance with the commonly expressed American opinion but it is essential to recognize that Dible's conclusions are supported by the fact that gastric ulcers are more common two to three inches from the pylorus while carcinoma occurs more frequently closer to the pylorus. The history of gastric cancer is short and that of ulcer long. Likewise the common age incidence in ulcer is 33 while in cancer it is 45. Thus it is necessary to recognize that the question as to whether gastric ulcer offers the histological factor in the development of gastric cancer remains debatable. Andistre in 1903 drew from clinical experience, four conclusions in respect to preexisting ulcer. (1) The change usually involves chronic ulcer near the pylorus and the change itself occurs in the margin of the ulcer and not in its base. (2) The transformation does not change the symptomatology for a long period but persistence of symptoms and increasing pain are suggestive that such change is taking place. (3) The origin of cancer in ulcer is suggested by the presence and persistence of hyperchlorhydria. (4) Simple ulcers may be the point of lessened resistance in which cancer may start.

Clinically cancer includes carcinomata and sarcomata, the latter forming only 5 percent or less of the malignant lesions of the stomach and are only recognizable after removal. Both conditions produce local destruction, both are progressive, malforming the stomach, extend to adjacent structures and produce distant metastases.

From the standpoint of morbid anatomy, cancer of the stomach presents itself in four gross types, the fibrous, the medullary, the ulcerating, and the colloid. The fibrous type is dense, limited, without tendency to ulcerate, makes the wall thick, unyielding, and is prone early to produce distant metastasis. The medullary type is rapid forming, soft, nodular, and protrudes into the lumen of the organ. It is said to metastasize early, a fact which is questionable as this lesion tends to differentiate rapidly and differentiating growths metastasize slowly, the higher the degree of differentiation the less the tendency for metastasis to occur. This type is always associated with secondary ulceration, infection, and marked enlargement of adjacent glands by inflammatory change. The ulcerating type is the most common form seen at operation. The base is necrotic with firm overhanging, proliferative, and undermined edges. Metastasis arises early and frequently is excessive in ratio to the size of the primary lesion. The colloid type is a diffusely infiltrating lesion containing a secretion resembling the "egg-white"; is edematous, ulcerates early, metastasizes early and shows a marked tendency to recurrence and forms 5 percent (Stinson) to 9 percent (Brinton) of stomach cancer.

Histologically the fundamental change in gastric cancer is an abnormal hypertrophy of the cells lining the gastric tubules, the process being restricted and varied by fibrous tissue resistance and vascular changes. Degenerative changes are of frequent occurrence and usually arise secondary to impairment of the vascular supply.

The location of the lesion in the stomach is of primary importance. These lesions viewed at autopsy are so massive that the point of origin is difficult to trace but studies from specimens removed at operation show

the lesions arise at the pylorus in 37 percent, in the antrum and on the lesser curvature in 29 percent, in the posterior wall in 6 percent, in the cardia in 5 percent, on the greater curvature in 1 percent, in the anterior wall in 1 percent and variably or undetermined in 16 percent.

The gross changes taking place in the stomach depend to a large degree upon the location of the lesion. Annular pyloric growths cause dilation otherwise the capacity is diminished. Growths adjacent to, but not involving the pylorus cause rapid emptying while cardiac lesions most commonly cause stenosis in the esophagus and lesions in the body of the stomach produce hour-glass contractions. Fixation of the viscus depends largely on the rate or amount of extension to adjacent structures.

Metastases is the one most important factor in determining treatment and prognosis. Enlargement of the perigastric lymphatics exists in 70 percent. MacCarthy and Blackford have pointed out that the extent of perigastric lymph gland involvement has nothing to do with the size of the lesion in the gastric wall nor does the size of the gland indicate whether or not malignant change is present. Aside from the glands adjacent to the stomach those commonly involved are along the spine, in the retrovesical space and above the left clavicle. Late the navel may become fixed and the site of firm nodular masses. Transfer to the liver exists in 15 to 35 percent depending upon the stage of the disease. Metastases to the liver and the gall tract usually cause bile duct obstruction early with its associated jaundice or portal obstruction with its coincident ascites. Ascites arises promptly where the lesion transfers itself to the peritoneal surface. The pleura, pericardium and lung are involved by metastases in five to eleven percent of cases. Transfer to the pleura usually produces a rapidly developing sanguinous effusion which frequently has been the first evidence of existing malignancy and in some instances has been improperly called a primary lesion of the pleura itself.

Smithies divides the symptoms and signs of gastric cancer into three groups; the first

showing a symptom complex with two definite stages; the second, a symptom complex manifestly malignant from the onset; the third, a symptom complex in which malignancy follows a long dyspeptic history referable to extragastric lesions. The first of these groups with a two stage symptom complex represents 61 percent of the cases, the duration of the first stage being eleven and one-half years while that of the second stage is only six months. During the first stage indigestion with epigastric distress exists in 88 percent and the pain or distress is in some relation to taking food, the relief periods being longer after heavy meals but the distress is more severe on its return than following light meals. Pain relief comes from alkalies, vomiting and diet. The appetite usually is limited by the patient's fear of food ingestion causing pain tho in this stage the food desire remains strong. Weight loss occurs during attacks and there is weight gain during the interval, an average weight loss of 17 lbs. occurring in this stage. Vomiting for relief occurs in the attacks in 60 percent when distress is marked. Bleeding exists in 17 percent but manifest anemia is only slight during this stage. Three possibilities exist at this stage, first, complete healing, second, typical benign ulcer, and third, cancer and in any given case the course of events cannot be prognosticated. The change to the second stage is usually gradual the course of symptoms becoming continuous where previously it was in attacks. Thus food aggravation, night distress, delayed vomiting, continuous occult blood in the stools, anemia, cachexia, maintained weight loss, hopeless apathy, pain that is rarely marked and a sore and heavy feeling arise. Vomiting tends to become constant, to occur in large amount and changes from a sour to a cheesy or rancid type and where ulceration exists streaking with blood occurs. The characteristic coffee ground vomit exists in only 17 per cent even tho in this stage 84 per cent show advanced lesions and 77 per cent show pathology which cannot be removed or relieved. The second group represents 31.6 per cent of cases malignant from the onset and having an average duration of only six and one-half



months. The characteristic onset is with ulcer type attacks of dyspepsia which arise associated with the signs of malignant systemic poisoning and rapidly tend to become constant; there is rapid emaciation and early the pain tends to become less severe and is aggravated by food intake. The transition is gradual and frequently the first sign that indicates the transition is a perversion of appetite shown by a pronounced distaste for certain foods such as milk, meats, sweets, legumes, and a keen desire for others, such as sour fruits, pickles and the like. As a rule distressing eructation precedes vomiting, either of which may be the first symptom. Vomiting occurs in 79 per cent and becomes a daily occurrence in 64 per cent. Diarrhea occurs in 17 per cent. The average hemoglobin is 56 per cent and usually a leucocytosis, approximately 12,000 exists. Operation according to Smithies, has never shown a removable lesion in this group. In the third group where malignancy follows a long dyspeptic history, the prior symptoms pointing to extragastric lesions average 9 years in duration, while the malignant syndrome exists for only five and one-half months. Prior to the proper diagnosis the previous symptoms frequently are found referable to the gall bladder, the pancreas, or the large bowel. The symptoms that manifest malignant change in this period are the same as in the second group.

The test meal is extremely valuable to show the emptying power of the stomach. Bennett has shown that gastric analysis properly carried out gives evidence early of gastric stagnation. Thus on a fasting stomach the evening prior to examination the patient should be given finely divided charcoal in milk and the following morning evidence of the charcoal is present in approximately 61 per cent of cases suspected of cancer. Clinically from the point of gastric acidity a test meal showing subacidity or an acidity goes hand in hand with gastric cancer according to literature but if we actually study the facts we find that inoperable or ulcerated carcinomas have an average free acidity of 2.4 with a total of 28 while operable forms with gross ulceration show an

average free acidity of 6.4 with a total of 28, and the carcinomatous ulcers show a free acidity of 31 with a total of 48. Progressive lowering of the free hydrochloric acid is of more value than an individual test especially when it occurs with the indications of lessened motive power. Lactic acid existing in the test meal simply means stagnation and it may occur in cases associated with hydrochloric acid values as high as 15.

From the clinical standpoint the signs and symptoms which are usually given as indicative of gastric cancer are hemorrhage, vomiting, tumor and cachexia. These represent late factors and to save life our tendency to give them undue weight or importance must diminish. Hemorrhage, however, is grossly present in 18 to 20 per cent and the gastric content on a meat free diet and tested with guaiac will show blood in 88 per cent. The stool will show direct or altered blood in 93 per cent. Gross blood does not exist early but microscopic blood and blood demonstrated by chemical analysis frequently occurs from the onset in all ulcerative types of cancer. Vomiting arises due to mechanical faults in emptying the most common cause being stenosis' but the amount is variable and in the early stages is intermittent. Part of the stenosis is due to spasm which may relax from time to time, thus reducing the amount of vomiting. In the late stages vomiting becomes constant and is present in 80 per cent of cases. Slight variation in the time of occurrence of vomiting in late cancer depends on the location of the lesion, thus, those at the cardia produce vomiting immediately after eating and those at the outlet relatively late. Such changes, however, are only historic in importance for they occur too late to be of diagnostic value and thus aid in the cure. The same is true in regard to the character of the vomitus, sour, rancid or coffee ground vomitus are characteristics developing late and have no diagnostic importance. Tumor is present in about 67 per cent but usually when the mass arising from malignancy is sufficient in size to be externally palpable, the process is hopeless. Likewise growths in the cardia and the posterior wall are not felt even late so that 9



per cent of gastric lesions of malignant nature never develop palpable tumors. The external mass is located in the right upper quadrant in 32 per cent, in the left upper quadrant in 27 per cent and rise in the mid-pigastrium in 11 per cent. Cachexia is always a late manifestation and is indicated by pallor, anemia, weakness, mental lassitude, loose dry skin, and edema of the ankles. When such changes arise the condition of the individual is hopeless as these changes are produced by systemic poisoning which has progressed beyond the hope of recovery. The blood changes in gastric carcinoma are those of a severe secondary anemia, the red blood cells average 4,500,000, the hemoglobin from 50 to 100 per cent with an average of 64 per cent. The color index is always below 1 though marked changes in the size, shape and degeneration of the red cells are common.

The most valuable single aid in the diagnosis of gastric cancer is the findings determined by roentgen study which show alteration of emptying power, change in peristalsis, deformity in outline, variation in size, abnormality of position, and fixation to adjacent organs. The characteristic cases show definite findings, ulcers having a diameter of more than 2 centimeters are malignant three out of five times. When characteristic roentgen findings exist, clinical findings exist in 91 to 95 per cent of cases, these being indicated by changes in the gastric contour in 93 per cent by the presence of mass in 73 per cent and by variation in the gastric acids in 88 per cent.

From the standpoint of diagnosis any individual over forty who comes with a complaint of dyspepsia, biliousness, or indigestion should be suspected of cancer until it is proved absent. Weight loss persistent in nature where the intake equals 2,000 calories per day also cause suspicion of cancer in some situation and we should suspect the stomach because of its frequent involvement. Likewise no case should be allowed to run along with a single examination following a persistent weight loss but should have frequent check up studies, by X-ray, by gastric analysis with reference to lowering of the acidity,

by examination of the stools for occult blood, and by frequent checks of weight.

Early diagnosis means early operation and the hope of cure, late diagnosis means nothing from the standpoint of the patient. McVicar in studies to determine the diagnostic evidence manifested in early lesions shows in 2,087 cases divided into classes by disposition into non-operative and operative that 828 were in the non-operative and 1,159 in the operative group. Of the non-operative cases 110 were rejected by the clinician, without roentgen examination, 531 were rejected by the roentgenologist, 128 presented doubtful lesions and operation was not urged, 90 were operable roentgenologically but clinically not, 69 were operable but the patient refused operation. Thus rejection is a combined study dependent upon the history obtained by the clinician and the roentgenologist but the latter plays the largest part in rejecting cases as being unsuitable for operative treatment. In the operative group of 1,159 cases, resection was prevented by internal metastasis and direct extension to vital structures in 434 cases, by local infiltration and internal metastasis in 203 instances and resection was possible in 522 cases. Thus it is apparent that only one-fourth of cases as they are now presenting themselves for diagnosis come with operable lesions. This is distinctly unfortunate because surgical treatment is the only method which merits a serious consideration in the treatment of carcinoma of the stomach. The mortality is not high and the percentage of 3 out of 5 with complete cures is rising. W. J. Mayo has a case now on record who lived twenty-six years from the time of operation and died of pulmonary tuberculosis without evidence of recurrence of malignancy. Balfour reports 120 consecutive resections with a mortality of 7.5 per cent. The terrible paradox exists that individuals rejecting operation early in curable stages clamor for palliative relief when the disastrous symptoms of the late stage arise.

As we have previously shown organic, gastric and duodenal lesions arise three times more frequently in men, but when gall-bladder lesions are considered the ratio reverses and they present themselves three times

more frequent in women. While the average age when cancer strikes is 52 according to McVicar the range is so wide that age cannot be assumed as having any diagnostic value. The analysis of cases show the old established criteria, such as retention, anacidity, marked weight loss and anemia are outstanding in inoperable lesions but of little significance in operable lesions as the diagnosis must be made in the absence of any one or all of these symptoms if cure is to result. It is better that you never see a case of late gastric cancer presenting all these factors if that is going to impress you as being the picture which must exist in order to make the diagnosis. The history in cases of cancer of the stomach is more variable than your texts would lead you to believe. Cancer can come from the clear sky and run progressively to termination, but this is not the rule. The fact that symptoms averaged over eleven months in duration shows that symptoms are not wanting but the interpretation most frequently is erroneous and the significance of them is not appreciated. The anatomic site of the lesion probably is the most important factor in producing discomfort. Thus lesions of the inlet or outlet will produce motor in-harmony earlier than those in which the body of the stomach is involved. Pyloric lesions early manifest motor irregularities which not infrequently are slight and because of their trivial nature are misinterpreted. An antecedent history of dyspepsia does not rule out cancer, for individuals harboring gall bladder disease, subject to migraine, to peptic ulcer, to functional gastric disturbances, to anacidity of a functional type, and those individuals of inferior makeup whose digestion crashes under emotional or physical strain are just as likely to have a cancer develop as the previously healthy individual.

The occurrence of previous ulcer history in patients with carcinoma depends in a large measure on the opinion of the observer as to the facts which make up such a history. McVicar points out that the experience of the Mayo clinic indicates that a history of periodicity daily sequence of pain, of food ease, and relief under treatment by frequent feeding and alkalies are common. Thus in an

attempt to learn the earliest signs of cancer, McVicar contracted the findings in cases of less than two months duration against those in which symptoms existed more than two years. He shows that no particular difference existed in either group, pain being predominantly the primary complaint. In each group this was followed by vomiting, hematemesis, weight loss and weakness.

The tendency exists at the present time among writers on carcinoma of the stomach to complain of the growing tendency to place entire reliance on the findings of the roentgenologist and to imply that other means are more satisfactory or superior. While no single point of approach is perfect, the roentgenological data give the major amount of information in early cancer. This depends on the thoroughness of examination, on the skill, the keenness of observation, the experience and the judgment of the examiner. When such ability is present it is rare that the clinician will have data of superior worth when the roentgenologist is in doubt. From the roentgen standpoint the visualization of an intergastric lesion is of main importance, but its interpretation is more difficult. Thus it is essential to distinguish between cancer, gastric syphilis, benign tumor, and benign ulcer. The most difficult distinction to make is that between benign and malignant ulcer and to complicate the situation it is the most frequent differentiation necessary. This difficulty is indicated in the study of cases from the Mayo clinic previously referred to, where in 522 instances where resection was possible, the roentgenologist was unable to decide the lesion to be malignant in 30 per cent and in 10 per cent the roentgenological evidence indicated or simulated benign ulcer. These facts again indicate the dictum which I have repeatedly stressed that ulcerative lesions of the stomach cannot be regarded as harmless until their nature has been determined by direct examination and pathological study. Too often the statement is made that improvement indicates a benign lesion and such a course should be instituted where doubt as to the character of the lesion exists. This teaching is vicious because there is a marked tendency for cancer to improve under careful



dietetic treatment. Thus frequently time is consumed which may allow operable lesions to reach inoperable stages. The pathological physiological basis for this improvement or apparent improvement rests on the fact that any malignant lesion is encompassed by inflammatory changes which tend to increase the inharmony present in the stomach. Such inflammatory change tends to subside under proper medical management and with such regression motility improves and the patient is temporarily better until the extension of the cancer again of itself produces limitation of motility.

Several reasons, aside from the lack of experience and thoroughness on the part of the observer, exist for tardy diagnosis. For example, most patients harboring cancer of the stomach are beyond middle age and are at that stage of life where they of necessity have to neglect discomforts due to focal infection, involuntary degeneration, and the like, if they continue the competitive struggle for existence. Again, many patients, due to inherent dread of cancer, hide their symptoms and delay consulting their physician. Likewise, patients yet have the tendency to refuse operation when diagnosis is established. Improvement in diagnosis must come through more widespread knowledge of the existence of cancer and from the tendency to easily become suspicious of the presence of cancer in any single case. Finally, it is essential to be frankly forceable in urging operation in favorable cases.

While roentgenology holds first place as a single factor in the diagnosis of gastric cancer that information must be supplemented by the facts gathered by the clinician, who must be alert to pick up the indication which will cause the patient to have roentgen studies. This duty rests more definitely on the physician than on the surgeon as he primarily makes the first contact with the patient.

The disaster of misinterpretation in early diagnosis is well illustrated by a case recently reported by Chumley of the Mayo Clinic. A locomotive fireman of 38 years of age first noted epigastric pain six years prior to his examination. The distress had always

come at the end of his run and would respond to food or medicine. The attacks recurred yearly and were characterized by hunger pain two to three hours after eating and were relieved by taking food. Five years after the primary onset gastric analysis showed blood and the x-ray studies an ulcer. Two weeks of hospital treatment and six weeks of dietetic care at home produced relief of symptoms and supposed cure. However, during the next ten months one spell of hematemesis and melena occurred, at the end of which time all of his symptoms recurred and persisted to the time of his examination two months later, when jaundice had been present for two weeks. There had been a thirty-pound weight loss in three years and a mass had existed in the epigastrium for a short period. Physical examination showed a mass in the region of the left sternomastoid, a mass the size of an egg in the epigastrium, above and to the right of the umbilicus. Gastric analysis showed a total acidity of 88 and a free acidity of 66, while roentgen study of the stomach showed inoperable carcinoma. The Vanden Bergh test was direct.

McVicar in discussing this case points out that here was a patient fourteen years below the average cancer age, with a long history of recurring relief that caused a diagnosis of ulcer fourteen months previously, followed by ten months of good health and at the time of examination in spite of an inoperable lesion in the stomach and distant metastases, indicated by the growth in the neck, still maintained high acids. With such an extensive metastasis the jaundice may have been due to an invasion of the liver or to direct pressure on the common duct by enlarged glands. The question of engrafting carcinoma on ulcer does not enter into the discussion of this case as much as does the fact that a lesion with the early manifestation of a benign growth was allowed to progress into a hopeless stage of malignancy.

The differential diagnosis of carcinoma of the stomach sometimes causes trouble to the unwary and not infrequently to the alert. Abdominal tumor is a sign of late cancer and the endeavor should be made to make a diagnosis prior to such development. Thus



slightly palpable ridges which move with respiration should always receive serious consideration. Such ridges which persist after lavage of the stomach and thorough cleansing of the bowel are sufficient to warrant exploration if their nature cannot otherwise be ascertained, for frequently they represent tumors of large size. Ninety per cent of tumors arising above the umbilicus are connected with the stomach and where connection with the stomach exists, 95 per cent are malignancies of that structure. While movable tumors offer a better surgical problem, fixation of a tumor does not make it inoperable.

Epigastric tumors which may be confused with gastric masses are those of the gallbladder; the liver; the pancreas, including cysts, cancer, and chronic pancreatitis; the omentum; the retroperitoneal tissues; the right kidney; the spleen, and the colon.

Lymph node involvement should always be searched for in instances where cancer of the stomach is suspected. In some instances where roentgen study is impossible, gland involvement may aid in diagnosis. It is more important in prognosis and in determining operability than in determining the diagnosis. No lesion can be surgically cured where lymph node metastasis exists and surgery can only palliate by relieving obstruction, etc. The common points of extension visible to us and palpable are in the region of the left clavicle, the recto-vesical space ("Blumer's shelf"), and in the lung by x-ray. Local or general enlargement of the liver and mediastinal thickening tend to indicate but does not prove extension.

Grave anemias tend to simulate cancer of the stomach. The primary types are recognizable by studies of blood smears and actual blood counts, but the severe secondary types, for instance, with prolonged septic infection, are more difficult to segregate. This is well illustrated in a recent case which we have seen. An elderly male showing the signs of severe secondary anemia, giving an indefinite gastric history and presenting persistent vomiting showed on roentgen study a gastric defect diagnosed as malignancy. To our sorrow we failed to recognize the meaning of low

phenolphthalein output and occasional pus cell in the urine, our attention being attracted to the evident gastric lesion in face of the fact that our original clinical impression was that the gastric symptoms were secondary to some other process, such as advanced pulmonary phthisis. Exploration showed a normal stomach; the patient progressing downward and apparently dying a uremic death. Post-mortem examination showed an advanced pyelonephritis, bilateral in type, with marked thickening of both ureters, and recent extension to the bladder. Two lesions are evident, the first that sometimes roentgen-ray examinations are misleading, and the second that massive disease of the kidney may exist and not show urinary findings to correspond with the pathology present. It is probable had we recognized the real meaning of the kidney function test and gone more exhaustingly into its cause a surgical death could have been avoided, even though with the amount of kidney destruction present we could not have prolonged life in the present instance to any extent.

Gallbladder disease, either inflammatory or malignant, may, when occurring in the aged, mimic gastric cancer, especially where involvement of prepyloric nodes causes delay in gastric emptying. Careful investigation of the history usually fails to show ulcer like dyspepsia and the earliest symptoms of gallbladder disease commonly follow typhoid, malaria, and chronic infections of the throat and teeth. Also one-third of gallbladder cases give a history of colic and recurrent jaundice. The final exclusion must come through gastric analysis with roentgen study and in a few cases by actual exploratory operation.

Primary cancer of the pancreas is said to be rare, though I have seen cases where the extension of the growth into the duodenum produced obstruction similar to that present in primary gastric lesions. The main differential point is that jaundice arises in pancreatic malignancy prior to obstruction, while in primary gastric lesions the obstructive cycle comes prior to the development of jaundice.

Tumors of the kidney, the large bowel,

and the omentum are stated to be difficult of differentiation from gastric lesions. However, their typical location, the absence of dyspeptic symptoms, and the presence of findings referable to other organs, namely, hematuria, diarrhea, low intestinal obstruction tend to make the diagnosis evident. Syphilis of the stomach frequently offers the most puzzling picture because lues may co-exist with cancer and frequently the findings in syphilis of the stomach may simulate cancer. To delay surgical treatment may allow operable lesions to become inoperable, while to resect a syphilitic lesion frequently means subjecting a patient to a formidable operation for a defect which will spontaneously disappear under proper therapeutic measures. Again, another phase exists, cancer with associated syphilis is prone like cancer to make apparent improvement and thus lead us to erroneous conclusions. Thus, Stokes, from his study of gastric lues, holds that no case should be kept on anti-syphilitic treatment for more than six weeks before exploration, unless the results of the therapy in that period produce sufficient change in the lesion to conclusively indicate its nature.

Finally, in the differential diagnosis it is essential to recall that weight loss, cachexia, vomiting, and anemia can occur in protozoan infections, in drug habitues, and in chronic constipation, any of which may demand all of our skill in order to separate these from malignancies in any location.

Only one rational method of treatment exists in cancer of the stomach, namely, removal of the growth. I have already indicated that Balfour shows recently only a 7.5 per cent mortality, 52 per cent of three-year cures, where adjacent gland involvement was absent, and 19 per cent of three-year cures where glands adjacent were involved. In order to see the whole picture let us examine some other phases. Thus, Persson, in 1,150 cases operated on, shows 339 explorations with a mortality of 17.1 per cent, 450 gastroenterostomies with a mortality of 28 per cent; 80.5 per cent died of recurrence in five years. Thus, Pearson, in 1,150 cases operated on, shows 339 explorations with a mortality of 17.1 percent, 450 gastro-enteros-

tomies with a mortality of 23 percent, and 361 radical operations with a mortality of 28 percent. 80.5 percent died of recurrence in five years. No case lived beyond this period where regional glands were involved. St. John, reporting 140 cases, showed thirty-two favorable for resection, slightly over 22 per cent, and reports an operative mortality of 43.8 per cent; 125 of the 140 cases were dead in eighteen months, eleven were alive at the end of four years, nine of which were resections. Thus 1.85 per cent of gastroenterostomies or palliative cases were alive at the end of four years, while 28.1 per cent of resections were living. To summarize, resection offers to the case of cancer of the stomach the danger of a primary mortality varying from 7.5 per cent to 43 per cent, with a prospect varying from 52 per cent for three-year cure to 28 per cent for four-year cure to 19.5 per cent for five-year, or what may be said to be permanent cure. Thus, considering the favorability and the recent favorable results as reported in literature we find that the case of cancer of the stomach without intervention has an absolutely hopeless prognosis and where intervention occurs in time one case in five has a probability of complete cure.

At actual operation resection depends on several factors. Those cases where no lymphatic involvement exists, where the lesion is confined to the gastric wall and is located near the pylorus offer the best after results as mobilization and wide resection is possible. It is in this group of cases that Balfour has shown that 52 per cent of three-year cures should be obtained with not over 8 per cent operative mortality. A second group are those cases where the lesion remains local, but lymphatic extension is evident. Here the percentage of three-year cures drops to nineteen and the possibility of permanent cure is always nil. It always must be borne in mind that simple enlargement of lymph glands does not mean involvement by cancer, so that other factors being equal the patient should always be given the benefit of doubt and the possibility of cure following resection. A third group are those where massive involvement of the stomach demands almost

total gastrectomy in order to get wide of diseased tissue. Only a few cases in this group will be operative, for in the majority with such a lesion the lymphatic extension will be so massive as to preclude any radical procedure. The final group are those cases in which extension exists to neighboring vital structures and damage to them in attempts at resection almost preclude an operative recovery and in such instances operation is ill advised, increasing the general operative mortality, and due to the disastrous results acts to deter many early cases from having an operation at the logical time. Likewise it is poor judgment to resect primary growths when distant metastasis exists.

No operation is standard for any case; each has to be considered by itself, and the operative measure fitted to the condition. Thus to my mind to state that the Billroth I has a greater mortality than the Billroth II or the Polya simply means that the patient was fitted to the operation rather than the operation to the patient. As a general rule, patients with long-continued obstructions respond better to two-stage procedures.

Finally, I want to call your attention to the fact that careful preoperative and postoperative care greatly reduces the immediate mortality and emergency operations on gastric cancer even in the face of marked obstruction should be procedures of the past. Pre-operatively, liberal diets with frequent lavage to guard against retention and vomiting should be given. Fluids forced by mouth, by rectum, beneath the skin, etc., increase the general body tone. Digitalis in some instances to steady heart action frequently is life saving if given prior to operation, and of no value when a break postoperatively arises. So also after operation, lavage of the stomach should be performed on the slightest sign of fullness without waiting for distention or vomiting to arise. Fluids should be forced in some manner so that no break in the water balance occurs. Finney recently has been using a jute tube; that is, a modified Rehbus tube, carried into the jejunum through the stomach in order to aspirate and in order to carry fluids into the lower bowel, and he believes its use is life saving.

Thus I hope through this long discourse I have led you to the belief that through careful diagnosis, made early, and proper treatment, cancer of the stomach is not as hopeless as some of your textbooks would lead you to believe.

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## EXTRAVASATION OF URINE\*

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Extravasation has been given many different definitions. Watson and Cunningham<sup>1</sup> call it "a diffuse, phlegmonous inflammation", while Silverberg<sup>2</sup> refers to it as a "perineal phlegmon, generally but somewhat misleadingly, called urinary infiltration or extravasation."

In the broad sense of the term, extravasation of urine signifies the escape of urine from the urinary tract into the surrounding tissues, through an opening in the mucosa produced by disease or trauma. Because of the greater frequency of extravasations occurring in the lower part of the male urinary apparatus, I wish to deal more particularly with this phase of the subject.

### *Anatomy*

A brief review of the structures involved should help in tracing the course of extravasations from the lower urinary tract.

According to Young<sup>3</sup> the perineal fascia is divided into a deep and a superficial layer.

The *deep* layer, or *triangular ligament*, sometimes called the *urogenital diaphragm*, stretches across the triangle formed by the descending rami of the pubes and is composed of a superficial or external layer, and a deep or internal layer.

The superficial layer is continuous posteriorly, with the deep layer of the superficial fascia (Colles' fascia).

The deep or internal layer is continuous posteriorly, with the two divisions of the endopelvic fascia known as Denonvillier's fascia. Laterally, the deep layer joins the obturator fascia covering the obturator internus muscle.

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The *superficial* fascia, or layer, is also divided into an external layer, or panniculus adiposus, and an internal layer, or Colles' fascia. The latter is one of the most important structures of the perineum. It is continuous posteriorly, with the posterior border of the triangular ligament. Laterally, it is firmly attached to the rami of the pubes. Anteriorly, it passes forward over the symphysis, to become Scarpa's fascia of the anterior abdominal wall. Between its lateral attachments it encloses the scrotal contents and invests the penis as far as the coronal sulcus.

Another structure, *Buck's fascia*, must be considered. This penile sheath is formed, according to Wesson,<sup>4</sup> from the inner fibres of the suspensory ligament reinforced by an aponeurosis from the ischiocavernosus muscles. This closely invests the corpora in an 8-shaped sheath, the upper part containing the two corpora cavernosa, while the lower contains the corpus spongiosum.

Thus there may be three types of extravasations from the lower urinary tract, according to the area involved:

1. Penile—or within Buck's fascia.
2. Perineal—anterior to the triangular ligament and downward into the space between the triangular ligament and Colles' fascia.
3. Pelvic—deep or internal to the triangular ligament invading the tissues around the prostate, bladder, rectum, etc.

#### *Etiology*

The etiology of extravasations may be injuries or infections.

1. Injuries causing extravasation result from faulty instrumentation or from some traumatism to the perineum, abdomen, or pubic rami, such as blows or kicks, falls astride, gunshot wounds, or external violence which fractures the pelvic girdle, causing a laceration of the urethra beneath the symphysis, or a puncture of the bladder wall by a spicule of bone. Often the rupture of the urinary tract is not suspected until the patient attempts to urinate. Crosbie<sup>5</sup> cites a case of rupture of the bladder in which the injury causing the rupture was so slight that

the history "was not elicited until, while operating under spinal anaesthesia, the man admitted that he had been drinking the day before and remembered falling on his face, and that he had not passed urine since."

Wolfer<sup>6</sup> has shown that sterile urine is not very irritating, in most cases, and produces a reaction in the tissues because of its mechanical pressure over a long period of time. His experiments on guinea pigs proved that "an ordinary amount—20 cc. to 60 cc.—of sterile urine produces no necrosis."

2. Infection is undoubtedly the most common primary factor in causing extravasations. The pathological changes of chronic urethritis, as described by Finger,<sup>7</sup> are produced in the urethral glands and periacinar spaces. Thus Motz and Bartrina's<sup>8</sup> three groups in the bulbous and membranous urethra—glands of Littre, Cowper's and the intrabulbar glands—are the seat of the inflammatory process and transmit the organisms to the surrounding tissues. When the urethral wall breaks down in these cases, and extravasation takes place into the surrounding structures, the amount of inflammation is in proportion to the virulence of the infecting organism. The presence of urine is not nearly so important as the fact that the tissues have been invaded by bacteria, though undoubtedly the presence of urine in the periurethral tissues adds to the destroying process, as Silverberg<sup>1</sup> says: "Though severe enough, even in the absence of urine, the inflammation is more severe, more rapidly spreading and more destructive, when urine is present." In nearly all of these cases the urine is infected as a result of long standing obstruction to urinary outflow, so that when a break occurs in the urethral wall, the tissues are invaded with an infected urine. Most cases are secondary to stricture of the urethra, though Kidd<sup>9</sup> reports that in over half of his cases with a history of gonorrhoea there was no stricture, while Bissel<sup>10</sup> also describes a case of extravasation with a stricture of large calibre. The condition rarely develops as a result of urethral calculus as in one of my cases and as reported by Rathbun,<sup>11</sup> Maylard,<sup>12</sup> and others.

### *Symptoms*

Necessarily the symptoms vary somewhat according to the area involved.

#### *Local Symptoms*

When an injury has ruptured the urethra external to the triangular ligament a small amount of bloody urine may be passed, but usually the patient cannot urinate, and a tense, tender swelling is found in the perineum, where the urine has escaped through the urethral rent into the space between the triangular ligament and Colles' fascia. The urine is usually uninfected, but if unrelieved it may soon become infected and produce the same series of symptoms and follow the same course as the infected extravasations into the same area.

If the rupture is internal to the triangular ligament there may be very few local symptoms except for a failure to urinate, and on passing a catheter only a small amount of bloody urine is obtained. Lowson<sup>13</sup> reports a case of this type: a man was thrown from a horse and no injury was suspected until he tried to urinate, when no urine came through the urethra, but he "voided into the torn structures."

Rupture of the bladder causes symptoms of shock, pain about the suprapubic area, difficulty or inability to urinate, and occasionally the inability to walk. If the rupture has occurred in the posterior-superior region of the bladder wall where it is covered with peritoneum, then the signs of peritoneal irritation are present—severe pain, distention, and tenderness over the lower abdomen, together with increasing signs of prostration.

In the infected cases the local symptoms vary with the virulence of the infecting organism.

In the penile type an infiltration caused by an organism of low toxicity may burrow along the sheath, forming an indurated tract that eventually opens either behind the glands or at the root of the penis.

In the acute cases, all the signs of acute inflammation—pain, heat, redness, and swelling—are present. The description given by White and Martin<sup>14</sup> is worth quoting: "The local symptoms are produced by the retention of an irritant and often poisonous fluid

within the tissues. The parts swell and become edematous, the color of the skin changes to a dusky red, purple, or dirty brown, emphysema occurs from the gases of decomposition, and spots of gangrene appear . . . sloughing may set in by the end of the first day." This sloughing process may pass forward and involve the gland penis. Sir Benjamin Brodie<sup>15</sup> stated that the appearance of a black spot on the glands after extravasation was a fatal sign, and Harrison<sup>16</sup> agrees with this opinion. The gangrene of the glands means, of course, a disturbance of the circulation coming to the glands through the damage to the corpus spongiosum.

The infected perineal extravasations may also be divided into the subacute and acute varieties.

In the subacute cases the infecting organism is not highly virulent, or the tissues possess more than the usual resistance, and the extravasation produces a fluctuant tumor situated in the peno-scrotal, or perineo-scrotal angle, later opening to form a urethral fistula.

The acute perineal cases are those most often seen in clinic practice. The tissues are invaded by an organism of high virulence and the infiltrating urine plus the products of acute inflammation are first confined to the space between the triangular ligament and Colles' fascia posterior to the scrotum. However, the rapidly accumulating tumefaction being prevented from passing down the thighs or into the anal region by the attachments of Colles' fascia, soon invades the scrotum, passes up over the symphysis, and spreads across the suprapubic area, and, if untreated, may extend even into the loins and up as high as the angles of the scapulae.

#### *General Symptoms*

In the early stages of extravasation following traumatism, there are very few general symptoms because the urine is, in practically every case, sterile, and does not produce the signs of systemic toxemia which occur in the infectious cases. However, if the extravasation is allowed to remain untreated for too long a time, then, as shown by Wolfer,<sup>9</sup> it causes an inflammation due to its mechanical pressure on the tissues which, even pre-

ceding an infection, may cause necrosis and systemic intoxication.

Because of its chronicity, there are little or no general symptoms associated with the sub-acute infected cases.

In the acute cases the general symptoms are those of a profound septicemia—prostration, high temperature, rapid pulse, shallow respiration, and a dry, glazed tongue. There may be a wandering delirium which terminates in death in coma, if the patient is not relieved at once.

#### *Diagnosis*

In the traumatic variety the diagnosis depends greatly upon the history of injury, and the inability to urinate. The suspicion of such a condition can often be further strengthened by a careful exploration of the urethra with a catheter. The failure to pass a catheter to the bladder or obtaining only a small quantity of bloody urine, helps in deciding that a rupture has occurred. Sometimes the injecting of a measured amount of sterile physiological salt solution, through the catheter, and noting the amount of output will aid in determining whether the solution is escaping from the bladder.

If the bladder is distended, it is satisfactory evidence that it is not ruptured, and the suspected injury must be sought in the urinary tract below it. However, in cases with marked prostration, severe pain in the hypogastrium, the bladder not palpable, nor evidence of extravasation about the bladder, rupture into the peritoneum must be considered. In such cases, a diagnosis must be made from a very careful history and perhaps from cystoscopy. The seriousness of the condition may warrant an exploration through a suprapubic incision or a cystoscopic examination. A skilled cystoscopist might obtain valuable information without endangering the patient. It is well to have the head of the table elevated when performing the cystoscopy. This procedure is not justified when it is known that the urine has been infected before the accident, and suprapubic exploration is undoubtedly indicated whenever there is sufficient evidence to indicate that a rupture has occurred.

There is usually very little difficulty in

diagnosing the infected cases. A history of urinary difficulty with a tender, swollen perineum or penis, or both, differentiate this condition from any similar swelling such as the idiopathic gangrene reported by Randall.<sup>17</sup> Certain cardiac and hepatic oedemas in which the scrotum and penis may be involved, sometimes closely simulate extravasation, but again the history will indicate the diagnosis.

#### *Treatment*

The treatment of traumatic extravasation is controlled by the areas in which it occurs. Ruptures of the bladder require immediate suprapubic incision with drainage of the extravasated urine extravasically, and continuous drainage of the bladder through a suprapubic tube. Unless the peritoneum has been opened, these procedures, if performed immediately, are usually sufficient for the satisfactory relief of the condition. However, there are a certain group of cases where fracture of the pelvic bones exists and the patient's recovery is delayed through infection of the fracture. In such cases great care should be exercised to prevent the extravasation, or the drainage which is instituted, for the relief of the extravasation, producing an infection which can extend into these areas.

Rupture of the urethra below or anterior to the triangular ligament, necessitates a perineal section: cutting down on a sound that has been inserted through the urethra as far as the rupture. The two ends of the urethra are sown together over a No. 18 French rubber catheter. The wound is closed with sufficient drainage, and suprapubic cystotomy immediately performed to divert the urine. Though it is possible to obtain satisfactory healing in a certain percentage of cases without performing suprapubic cystotomy, the failure to divert the urine produces, in most cases, changes that result in most annoying strictures, which are cured with greatest difficulty.

The treatment of the infected type is, of necessity, somewhat different. Numerous articles have been written with regard to the different types of treatment and varying statistics given to prove the efficiency of each. Undoubtedly this type of extravasation de-



mands immediate, vigorous, surgical treatment. Brodie<sup>18</sup> wrote, "Where the urethra has given way behind the stricture and the urine has become effused into the cellular texture, very prompt and vigorous measures are necessary: delay is fatal." White and Martin<sup>14</sup> state, "The treatment of extravasation of urine is sufficiently simple in theory. The two indications are: prevention of further infiltration and thorough drainage." Myer and Moncrief<sup>18</sup> say ". . . establish drainage of the bladder in a rational manner, combat the infection in the infiltrated areas." Lejar<sup>19</sup> and Keyes<sup>20</sup> stress the necessity of early adequate surgery.

Twenty-six cases of the infected type have been treated in Dr. Montague Boyd's Urological Service in the Medical Department of Emory University, Atlanta, Ga., since September, 1926. The anesthetics varied, according to the patient: ether, nitrous-oxide-oxygen, caudal and local field block (suprapubic) were used. The cases were classified as:

		Per Cent
Strictured .....	24	92.3
No stricture .....	2	7.7

The method of treatment of the strictured cases was to immediately divert the urinary stream by suprapubic cystotomy, followed by multiple incisions in the infected area. The incisions were lightly packed with gauze and the dressings saturated with 1-4000 potassium permanganate solution.

The two cases without strictures were not given the benefit of the suprapubic drainage, but received multiple incisions in the area of extravasation. It is interesting to note that both of these patients died, while the mortality rate for the twenty-four cases on which the suprapubic cystotomy was performed was 20.9 per cent.

Treatment	Cases	No.	Mortality Per Cent
Suprapubic cystotomy .....	24	5	20.9
Multiple incisions (only)	2	2	100.

Undoubtedly the treatment of choice in these cases is by diverting or "sidetracking" the urinary stream and freely incising the infected area. Later, when the patient has

sufficiently recovered from the extravasation, any urethral pathology may be treated. As to what this treatment may be must be entirely controlled by the special conditions that present themselves. In many cases a filiform can be passed, followed by follower sounds, until full dilatation of the urethra is accomplished; then the suprapubic tube is removed.

By this method most fistulae close spontaneously. Some cases require an external urethrotomy because of an impassable stricture; however, this can be performed with much greater assurance after the inflammation has subsided than if attempted before this has occurred.

Wolfer,<sup>6</sup> Myer and Moncrief,<sup>18</sup> and Greenberg<sup>21</sup> have urged the importance of early suprapubic drainage of the bladder, together with multiple incisions of the infiltrated areas. Wolfer<sup>6</sup> says ". . . it is the only proper procedure. First, it reduces the mortality rate and lessens the destruction of parts. Second, we avoid persistent perineal fistulae" (as in perineal drainage). Myer and Moncrief write, "The method of choice in these cases is immediate suprapubic cystotomy, multiple incisions, and free drainage of the infected tissues."

There can be no question but that the result obtained in handling these cases has definitely proven to the satisfaction of everyone connected with the urological department of Emory University that suprapubic cystotomy is indicated in practically all cases, and it has now become a routine procedure for all cases of extravasation. The procedure has many advantages, one of the principle ones being the rapid closure of wounds without extensive scar tissue formation.

#### Case Reports

Case 1.—B. E., aged 26, truck-driver. Admitted Aug. 13, 1926, Grady Hospital, No. 21280. *Complaint:* Painful swelling in scrotum and penis. Purulent discharge from penis and open sinus in scrotum. *History:* Sore on penis in 1918. Gonorrhea on several occasions, although date of original discharge is uncertain. Urethral discharge for past three months. Difficulty in urinating began eleven days ago and the penis became swollen. Seven days ago he fell, striking his

scrotum, which began to swell and become painful. The swelling pointed at the base, and opened today with the discharge of pus and blood. *Physical*: The penis and scrotum are swollen twice their normal size, with the skin tense and tender. There is a discharging sinus at the base of the scrotum and the swelling extends up over the right suprapubic region. The patient appears to be in considerable pain. Temperature, 101; pulse, 120; respiration, 24; white blood count, 10,800; polys, 84 per cent. *Operation*: Under nitrous-oxide and oxygen and ether, a suprapubic cystotomy was performed; the scrotum and penis incised, and the incisions lightly packed with iodoform gauze. The patient steadily improved and was dismissed October 9, 1926.

*Case 2.*—D. C., aged 41, laborer. Admitted October 3, 1926, Grady Hospital, No. 21569. *Complaint*: "Fever," pain and swelling in the suprapubic area. *History*: Gonorrhea, followed by urethral stricture and external urethrotomy fifteen years ago. Since then he has had a urethral fistula at the site of the urethrotomy. Increasing difficulty in urination led to an attempted catheterization yesterday with negative result. He stated that the suprapubic area started to swell nine days ago, and since then the swelling and pain has increased. *Physical*: A suprapubic swelling extended nearly to the umbilicus. The swelling was indurated along the edges, fluctuant over the top, and very tender on palpation. At the site of the former urethrotomy was a keloid containing two sinuses through which the patient urinated. Urine—acid, turbid, trace albumen, 100 pus cells to L. P. F. Blood—W. B. C., 14,800; polys, 84 per cent. *Operation*: Under local anesthesia an area about six inches in diameter above the symphysis was opened, and about 1,000 cc. of pus (B. Coli odor) obtained. Suprapubic cystotomy was performed in the usual manner, and three drains left in the infected area. Blood chemistry (next day): sugar, 71.4 mg.; N. P. N., 60 mg.; U. N., 36 mg.; creatinine, 2 mg. Wassermann, negative. The drains in the suprapubic area discharged freely for about seventeen days. The patient's condition steadily improved and he was dismissed to the Out-patient clinic on October 25, 1926.

*Case 3.*—A. J., aged 43, porter. Admitted October 16, 1926, Grady Hospital, No. 21772. *Complaint*: Patient moribund and apparently in uremic state when admitted to hospital. *History*: Gonorrhea ten years ago. Urethral discharge for the past three months. Nocturia, two or three times for past month. *Physical*: Patient in coma and could not be

roused. Respiration labored and pulse fast, though of good quality. Chest and limbs twitched occasionally. The bladder was distended almost to the umbilicus. Perineum swollen, nodular, and contained two sinuses which discharged pus. Patient could not be catheterized because of urethral stricture. *Operation*: Suprapubic systotomy was performed under local anesthesia, and a large amount of greenish pus obtained from the perivesical spaces. Pockets of pus in the perineum were opened and lightly packed with gauze. The patient continued in coma and died the next day.

*Case 4.*—A. H., aged 49, porter. Admitted October 24, 1926, Grady Hospital, No. 22241. *Complaint*: Retention of urine and tender swelling in the perineum. *History*: The patient had had dysuria for twenty years. He was catheterized four days ago, and again two days ago. He had not voided since that time. His bladder had been aspirated suprapubically today. He denied either gonorrhea or syphilis. *Physical*: There is marked distention of the lower abdomen, which was apparently caused by his over-filled bladder. The suprapubic area was slightly tender and edematous. There was a tense, tender mass in the perineum. Blood—R. B. C., 4,980,000; W. B. C., 14,650; Hb., 85 per cent; polys, 79 per cent; S. L., 11 per cent; LL, 8 per cent; trans., 2 per cent. *Operation*: Under local anesthesia, suprapubic cystotomy was performed. The perineum was incised and two drains inserted. The patient gradually improved and was dismissed in good condition November 22, 1926.

*Case 5.*—E. H., aged 36, laborer. Admitted December 7, 1926, Grady Hospital, No. 22779. *Complaint*: Retention of urine and tender swelling in the perineum. *History*: Gonorrhea seven years ago, with urethral discharge since. Acute retention six years ago relieved by a doctor. Dysuria for several months and complete retention since yesterday. *Physical*: Suprapubic area was distended by bladder. Perineum was swollen, tense, and tender. *Operation*: Under gas-oxygen and ether anesthesia suprapubic cystotomy was performed and the perineum opened and drained. The patient improved steadily, though repeated prolonged attacks of hiccoughs were difficult to control. He was dismissed to the clinic January 12, 1927.

*Case 6.*—M. W., aged 51, laborer. Admitted January 9, 1927, Grady Hospital, No. 23123. *Complaint*: Retention of urine with soreness and swelling in the perineum. *History*: Gonorrhea twenty-one years ago, with intermittent discharge since. Also had a penile sore at that time, but has never had



any antisyphilitic treatment. Soreness in perineum started about three weeks ago, increased and involved the scrotum. He has had increasing difficulty in urination, with complete retention today. *Physical*: The suprapubic area, penis, scrotum, and perineum swollen, tense, and tender. *Operation*: Under local anesthesia, suprapubic cystotomy was performed and multiple incisions made in the scrotum, penis, and perineum, and drained with Penrose tubing. The patient's condition improved for about five days, but then a sharp turn for the worse was noted, and he died January 26, 1927, from septicemia.

*Case 7.*—H. H., aged 39, laborer. Admitted January 14, 1927, Grady Hospital, No. 23182. *Complaint*: Pain and swelling in the left suprapubic area and left flank. *History*: Gonorrhea sixteen years ago, with urethral discharge since. Treated for syphilis twenty-five years ago. Ten days ago he noticed an increased difficulty in urination, together with pain and swelling in the perineum and painful urination and defecation. *Physical*: The suprapubic area was swollen and tender from the symphysis to the left loin, with the skin shiny and tense. The swelling was soft, fluctuant, and extremely tender. The penis, scrotum, and perineum were swollen and tender. *Operation*: Under gas-oxygen and ether anesthesia a suprapubic cystotomy was performed, and multiple incisions made in the left lower abdominal area and perineum, from which about 1,000 cc. of purulent material was obtained. The patient improved rapidly and was dismissed February 16, 1927.

*Case 8.*—B. N., aged 48, porter. Admitted May 28, 1927, Grady Hospital, No. 24882. *Complaint*: Retention of urine and perineal abscess. *History*: Gonorrhea twelve years ago. Partial retention of urine for the last six months, with complete retention this morning. *Physical*: Tenderness over the abdomen, apparently caused by a distended bladder, which extended half way to the umbilicus. Multiple strictures could be felt along the urethra and there was a tender swelling in the perineum. *Operation*: Suprapubic cystotomy was performed under local anesthesia and multiple incisions made in the perineum. The patient made an uneventful recovery and was discharged to the outpatient clinic July 15, 1927.

*Case 9.*—W. A., aged 27, laborer. Admitted May 30, 1927, Grady Hospital, No. 24913. *Complaint*: Massive swelling and soreness of penis and scrotum. *History*: Gonorrhea twelve years ago and chancroid

seven years ago. Epididymitis one year ago. Seven days ago the patient began to have pain and swelling in the penis. Several ulcerations appeared on the penis, which discharged pus. *Physical*: The penis was swollen and tender, and its surface showed purulent, gangrenous areas. *Operation*: Under ether anesthesia, suprapubic cystotomy was performed and linear incisions made in the penis. The patient was moribund when admitted, with a positive blood culture, and died June 8, 1927.

*Case 10.*—J. W., aged 28, drayman. Admitted June 22, 1927, Grady Hospital, No. 25188. *Complaint*: Swelling and pain in lower abdomen, penis, and scrotum. *History*: Gonorrhea nine years ago. No symptoms of stricture. Three days ago he first noticed pain in the lower abdomen and scrotum and also swelling of the scrotum. *Physical*: The left lower quadrant of the abdomen was swollen, distended, and edematous, and there was crepitation on pressure from the inguinal ligament to the midline as far up as the umbilicus. The penis and scrotum were markedly swollen, tense, and tender. *Operation*: Suprapubic cystotomy under local anesthesia and multiple incisions in the lower abdominal wall, scrotum, and penis. The patient's condition was very poor. He died June 25, 1927.

*Case 11.*—J. M., aged 38, packer. Admitted July 3, 1927, Grady Hospital, No. 25305. *Complaint*: Pain and swelling in the perineum, scrotum, penis, and suprapubic region. *History*: Acute retention four years ago, at which time he was catheterized. He passed a stone after this attack. One week ago he began to have difficulty in urinating and his bladder felt distended. Four days ago his perineum and scrotum began to swell and has increased until admission. *Physical*: The patient appeared to be in severe pain; the lower abdomen distended, and the abdominal wall very painful on palpation. The penis, scrotum, and perineum were also swollen and very tender. *Operation*: Suprapubic cystotomy under local anesthesia, and multiple incisions in penis, scrotum, and perineum. The tissues of the abdominal wall, penis, scrotum, and perineum were gangrenous. He died twelve hours after operation.

*Case 12.*—O. W., aged 34, laborer. Admitted August 21, 1927, Grady Hospital, No. 25865. *Complaint*: Pain and swelling in the perineum, scrotum, penis, and suprapubic area. *History*: Gonorrhea twenty years ago, sixteen years ago, and again forty-five days ago. Syphilis seventeen years ago, for which he received some treatment. For one



month he has had increasing dysuria, frequency, and nocturia. The swelling started in the perineum one month ago and spread to scrotum, penis, and suprapubic area. *Operation:* Suprapubic cystotomy under ether anesthesia and multiple incisions made in the extravasated areas. Considerable gangrenous material was removed from the scrotum. The patient recovered rapidly and was discharged August 20, 1927.

*Case 13.*—G. M., aged 33, driver. Admitted August 3, 1927, Grady Hospital, No. 25989. *Complaint:* Inability to urinate and swollen, tender penis. *History:* Gonorrhea fifteen years ago. For the past three or four years the patient has had difficulty in urinating, which terminated in complete retention for the past twelve hours. *Physical:* The suprapubic area showed a distended bladder. The penis was swollen and tender, while the skin of the lower third was gangrenous. *Operation:* Suprapubic cystotomy was performed under general anesthesia and also a large abscess in the penis incised. The patient made a steady recovery and was dismissed August 20, 1927.

*Case 14.*—E. G., aged 34, painter. Admitted September 11, 1927, Grady Hospital, No. 26117. *Complaint:* Retention of urine, with swelling, pain, and tenderness of the perineum, scrotum, and penis. *History:* Gonorrhea fourteen years ago and syphilis twelve years ago. He had two attacks of acute retention—one twelve years ago and one three years ago—both of which were relieved by catheterization. Six days ago his perineum and scrotum became very tender and began to swell and he had to stop work. *Physical:* He complained of severe pain in the swollen perineum. The entire penis and scrotum were enormously swollen. There was some swelling over the symphysis. *Operation:* Suprapubic cystotomy was performed under local anesthesia and multiple incisions made in the perineum, scrotum, and penis, from which a large quantity of foul-smelling pus was obtained. The patient improved steadily and was dismissed September 28, 1927.

*Case 15.*—W. J., aged 37, laborer. Admitted October 3, 1927, Grady Hospital, No. 26404. *Complaint:* Pain and burning on urination. Swelling in perineum which is very tense and tender. *History:* Gonorrhea sixteen years ago. About three months ago he began to have some burning on urination, with occasional retention and a persistent discharge. The frequency of urination was markedly increased. About three weeks ago a swelling appeared in the perineum to which a carbolic acid solution was applied with ap-

parent relief, though an opening occurred on the left side of the perineum, through which some urine passed on urination, accompanied by exquisite pain. The swelling in the perineum increased and became very tender. *Physical:* Scrotum and perineum were swollen and tender. A urethral fistula opened at the left perineo-scrotal junction and the whole area was extremely tender. Wassermann, positive. *Operation:* Under sacral anesthesia a large perineal abscess that extended up under the scrotum was drained. He was then transferred to the syphilis clinic for treatment in the hope that his perineal condition would improve. His condition remained stationary and he was returned to the hospital, where a suprapubic cystotomy was performed. He made an uneventful recovery, and subsequently the urethra was dilated and the suprapubic tube removed. He was dismissed in good condition October 7, 1927.

*Case 16.*—G. W., aged 21, laborer. Admitted October 15, 1927, Grady Hospital, No. 26559. *Complaint:* Inability to urinate and a painful swelling in the perineum, scrotum, and penis. *History:* He had a sore on the penis eighteen months ago, and gonorrhea one year ago. For the last six months he had noticed an increased difficulty in urination. For a month his scrotum had been swollen and two fistulous tracts opened in the scrotum through which he urinated. He had had complete retention for eighteen hours. *Physical:* The perineum, scrotum, and penis were greatly swollen. There were two fistulous tracts in the scrotum and an impassible stricture of the urethra. *Operation:* Under general anesthesia, a suprapubic cystotomy was performed and multiple incisions made in the perineum, scrotum, and penis. A large amount of pus was obtained from both the perineum and scrotum. The patient made a steady recovery and was dismissed November 14, 1927.

*Case 17.*—D. C., aged 34, tailor. Admitted June 4, 1928, Grady Hospital, No. 29572. *Complaint:* Pain in the penis and scrotum and swelling of scrotum. *History:* He had a sore on his penis seventeen years ago and a urethral discharge eight years ago. Subsequent to the urethral discharge he developed a stricture, for which he was dilated. About five months ago he developed an abscess in the penoscrotal angle, which, after opening, remained as a urethral fistula. Later another fistulous tract opened at the base of the scrotum. One week ago the scrotum began to swell and became quite painful and three more fistulae opened—one near the base of the scrotum and two near the base of the

penis. There was some tenderness over the suprapubic area. *Operation:* Suprapubic cystotomy under general anesthesia. The urethra was dilated and the fistula closed spontaneously. The patient was dismissed to the clinic June 4, 1928.

*Case 18.*—N. M., aged 47, chauffeur. Admitted July 25, 1928, Grady Hospital, No. 30291. *Complaint:* Pain and swelling in the perineum, and painful, difficult urination. *History:* Gonorrhea twenty-nine years ago. Partial retention of urine ten years ago, for which he was catheterized. He had another complete retention four years ago at which time the lower third of the penis was greatly swollen and was amputated. About four months ago he noticed that he was having increasing difficulty in urinating and two swellings appeared in the perineum. These were opened and remained as fistulae. The pain and swelling in the perineum gradually increased. *Physical:* The lower abdomen was tender. The penis was a stump. The perineum was swollen and revealed the openings of two fistulae on either side of the midline. The scrotum and perineum were very tender. *Operation:* Suprapubic cystotomy under general anesthesia and one week later the perineum opened and drained. Dilatation of his urethra was very difficult, but eventually a No. 26 French sound was passed. The fistulae closed and the suprapubic tube removed. He was discharged to the clinic March 21, 1929, in good health.

*Case 19.*—W. M., aged 33, janitor. Admitted August 31, 1928, Grady Hospital, No. 30842. *Complaint:* Swelling and pain in the scrotum. *History:* Gonorrhea fifteen years ago, but no history of stricture. About four years ago his scrotum began to swell, but the swelling disappeared after treatment with flaxseed poultices. Four days ago the scrotum began to swell again, and was greatly distended within twenty-four hours, and has remained so since. There is some pain in the scrotum, but not severe. *Physical:* Scrotum swollen to six or seven times its normal size. The penis is also swollen and an old sinus is draining at the peno-scrotal junction. *Operation:* Suprapubic cystotomy under general anesthesia with multiple incisions in the scrotum and perineum. The patient steadily improved and was dismissed in good condition October 10, 1928.

*Case 20.*—W. S., aged 32, plasterer. Admitted September 2, 1928, Grady Hospital, No. 31153. *Complaint:* Pain and swelling in the penis. Inability to urinate. *History:* Gonorrhea thirteen years ago, followed by stricture, for which he has been treated at

various intervals since. Four days ago he noticed a swelling of the penis and came to the hospital because of the inability to urinate. *Physical:* The entire penis and anterior portion of the scrotum were greatly swollen and very painful. After meatotomy the patient urinated freely. *Operation:* Multiple incisions in the penile tissues. Because the patient could urinate freely, suprapubic cystotomy was not performed. However, the destructive process in the penis continued, a gangrenous area developed on the glands, and the patient died September 30, 1928.

*Case 21.*—W. C., aged 52, laborer. Admitted September 24, 1928, Grady Hospital, No. 31197. *Complaint:* Pain and swelling of scrotum, right inguinal region and right flank. *History:* Gonorrhea ten years ago, with some difficulty in urination since that time. He had had urethral dilatation on several occasions. Twenty days ago he developed considerable difficulty in urinating, which lead to complete retention two days ago, at which time a swelling appeared in the scrotum and right inguinal region. *Physical:* The abdomen was spastic and tender throughout, but more particularly in the right flank and inguinal region. The lower right abdomen was crepitant. The right scrotum and cord were indurated, swollen, and very tender. There was no stricture and urinated freely. *Operation:* Multiple incisions above the right inguinal ligament and on the right side of the scrotum. A large amount of dark green pus with an extremely foul odor was obtained. The patient seemed to improve after drainage, but later developed further infiltration on the right side and died on September 28, 1928.

*Case 22.*—A. M., aged 33, laborer. Admitted October 29, 1928, Grady Hospital, No. 31629. *Complaint:* Swelling and pain in scrotum and urethral fistula on right side of the scrotum. *History:* Gonorrhea five years ago. He has had some difficulty with some pain on urination for the past three years. One week ago he first noticed a swelling in the right scrotum, which opened spontaneously to form a urethral fistula. Scrotum swollen and tender for one week. *Physical:* The right side of the scrotum was swollen, with a fistula opening near the peno-scrotal angle. The edema extended upward along the right cord. *Operation:* Suprapubic cystotomy under local anesthesia, with multiple incisions in the right scrotum, from which considerable pus was obtained. The patient improved rapidly and was apparently ready to be discharged when he developed a bac-



terial pericarditis which caused his death on December 28, 1928.

*Case 23.*—J. L., aged 40, laborer. Admitted November 2, 1928, Grady Hospital, No. 31680. *Complaint:* Pain and swelling of the scrotum and painful, difficult urination. *History:* Gonorrhea seventeen years ago, followed by urethral stricture. Complete retention of urine in 1917, for which the urethra was dilated. He has had a small stream since. On October 23, 1928, while straining to urinate he was seized with a sudden acute pain in the "pelvis" and along the shaft of the penis, after which he passed a quantity of pus and blood. The next day his scrotum began to swell. *Physical:* Scrotum tense, tender, and greatly swollen. The penis and suprapubic region was also swollen. There was an impassable stricture of the urethra. *Operation:* Under caudal and local field block suprapubic cystotomy was performed and five long incisions made in the scrotum, from which a quantity of foul-smelling pus was obtained. Incisions packed with gauze and a 1-4000 potassium-permanganate solution applied. He made an uneventful recovery and was discharged to the clinic December 12, 1928, wearing his suprapubic tube, and with a urinary fistula at the peno-scrotal angle. Since then his urethra has been dilated to No. 30 French, his tube removed. He is in good health, has no fistula or urinary difficulty, and the scars on his scrotum are insignificant.

*Case 24.*—D. H., aged 53, laborer. Admitted December 31, 1928, Grady Hospital, No. 32407. *Complaint:* Pain and swelling in the perineum and scrotum. *History:* Gonorrhea fifteen years ago, with some dysuria since. About five days ago he developed a painful swelling in the perineum which increased until admission. *Physical:* Large, hard, rounded swelling in the perineum and anterior part of the scrotum. The swelling was very tender. *Operation:* Suprapubic cystotomy under caudal and local with multiple incisions in the perineum. He improved steadily, his urethra was dilated, the perineum closed spontaneously, and he is now in good health.

*Case 25.*—D. C., aged 38, laborer. Admitted January 17, 1929, Grady Hospital, No. 32665. *Complaint:* Acute retention of urine, with pain and swelling of the distal third of the penis. *History:* Gonorrhea fifteen years ago, complicated with epididymitis and inguinal lymphadenitis. Four years ago he had the sensation of something tearing loose in the urethra and passing down to the distal end. This was followed by a

considerable hemorrhage for two hours, and he has had a small stream since. One year ago he had a sore which almost destroyed the glands. He had had complete retention of urine for twelve hours before admission. *Physical:* The distal third of the penis was swollen, tense, and tender. The prepuce was so edematous that the glands could not be palpated. He was unable to urinate and a catheter or filiform could not be passed. The suprapubic area bulged from a distended bladder. *Operation:* Suprapubic cystotomy under spinal anesthesia. A dorsal slit was made in the prepuce and a ventral incision made in the area of greatest tenseness was deepened to the fossa navicularis, from which a calculus, 3 cm. by 1½ cm. was removed. Since that time a circumcision has been done and his urethra dilated. The fistula made when the stone was removed has closed spontaneously.

*Case 26.*—L. C., aged 20, laborer. Admitted February 20, 1929, Grady Hospital, No. 33178. *Complaint:* Difficult urination and a tender swelling in the perineum. *History:* Gonorrhea four years ago, with an intermittent discharge since. Three weeks ago he began to have difficulty in voiding. Two weeks ago he began to have severe pain in the perineum and noticed that it was swollen ten days ago. For the last two weeks he has had great pain on urination or defecation. *Physical:* Purulent discharge from the urethra. Slow, difficult urination—a filiform could be passed with difficulty. A tender swelling in the perineum. *Operation:* Suprapubic cystotomy under caudal and local anesthesia and two deep incisions made in the swollen perineum, from which about 500 cc. of pus was drained. The patient recovered rapidly; his urethra was dilated to No. 30 French, and his perineal opening closed spontaneously. He was discharged well on March 22, 1929.

#### CONCLUSIONS

1. Traumatic extrasavation may occur from apparently minor injuries.
2. Cystoscopy in suspected rupture of the bladder, in known infected cases, is not justified.
3. Immediate surgical treatment should be instituted in all extravasations.
4. Suprapubic bladder drainage is the method of choice.
5. Urethral pathology may be treated after the initial reaction has subsided.

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## PANCREATITIS\*

### *Review of the Literature and Case Reports*

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Deaver says that a discussion on pancreatitis is always in order. It is only by keeping this rare disease in mind that one is able to suspect it when the occasion arises. Another distinguished surgeon says the future is full of promise, and another says that there is much still to be learned. There are two types, acute pancreatitis and chronic pancreatitis. Acute pancreatitis may be divided into three classes: 1. Hemorrhagic pancreatitis, or hemorrhagic necrosis of the pancreas. 2. Suppurative pancreatitis. 3. Gangrenous pancreatitis.

This classification is not practicable because pancreatitis is considered the same disease at different stages. In the acute type early diagnosis is of the greatest importance, for delay means complications and disastrous results. In no other catastrophe of the abdomen is delay wrought with so much tragedy as acute pancreatitis. It is probably only

equaled by a ruptured appendix or a perforation of the gastro-intestinal tract.

There are two theories regarding the etiology of pancreatitis. Archibald and his school believe that the infection goes down the common duct and then on account of a stone in common duct or of spasm of sphincter of Oddi, or of some obstruction, bile is forced into the ducts of the pancreas and thereby sets up a pancreatitis. They also claim, and, with some evidence, that edema of the pancreas often occurs from sterile bile being forced into the pancreatic ducts. This causes an attack of acute indigestion and generally passes off, causing no harm; sometimes one may have this kind of indigestion for years off and on and becomes accustomed to it, and calls it his "indigestion" when in reality it is his "pancreatitis." When the bile is infected there is a different story. The pancreas becomes edematous, but after a few hours, instead of getting better, it gets worse till hemorrhage and gangrene occur.

On the other hand, Deaver and his adherents believe that infection is carried through lymphatic channels. They believe that organisms and toxins can penetrate the walls of the gallbladder and thus infect the lymphatic glands. It is well known that pancreatitis can occur even when the common duct and the ducts of the pancreas enter the duodenum by separate openings, and also pancreatitis has occurred in an accessory pancreas. Deaver does not believe in laboratory made diagnosis — "Machine diagnosis can never supplant clinical wisdom," he says; "the surgeon walks by sight and touch and not by faith alone."

Infection and trauma are the causes of pancreatitis. Infection may reach the pancreas by the common duct from the gallbladder, by the lymphatics, by the blood stream, or from the intestinal tract. The colon bacillus and streptococcus are generally the offending organisms, but others have been found, such as pneumococcus, staphylococcus, *B. proteus vulgaris* and *B. cap. aerogenes*. Other causes may be: 1. Gallstones. 2. Pancreatic stones. 3. Traumatic necrosis. 4. Perforating ulcers of stomach or duodenum. 5. Dis-

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eases of the biliary tract or extensive cholangitis. Other causes such as alcoholism, heart lesion, diabetes, emphysema, stenosis at the duodenal opening of the pancreas may be mentioned. Pancreatitis may result from typhoid fever, mumps, or influenza, from arteriosclerosis, chronic passive congestion of the liver, tuberculosis, syphilis, morphinism, imperfect blood supply to the gland due to spasm of the arteries, thrombosis and embolism.

It is hard to say just what the symptoms are, for the pancreas is deeply seated, rarely suspected, and generally overlooked; because we, as a rule, think of some other more common disease. The pain generally radiates to the left, gallbladder disease to the right, but occasionally the pain of gallbladder disease goes to the left. It may be, since the pancreas is affected in a great many cases of gallbladder disease, that the pain that goes to the left in gallbladder disease is in reality a pancreatic pain.

In the acute form of pancreatitis the patient gets sick in a hurry. The leukocyte count is high, the abdominal pain and shock is out of all proportion to the physical findings. There are a few laboratory tests that may be done: Some claim that they are of great value, others that they are not. Sometimes there is an early morning diarrhea in pancreatic diseases, fat in the stools and sugar in the urine.

Moynihan says, "Acute pancreatitis is to be suspected when a previously healthy person or a sufferer from an occasional attack of indigestion is suddenly seized with violent pains in the epigastrium, followed by vomiting and collapse; and, in the course of twenty-four hours, by a circumscribed epigastric swelling, tympanic or resistant, with slight rise of temperature."

What Fitz, one of the early writers on pancreatitis, said is true now: "Sudden, severe, often intense, epigastric pain without obvious cause, in most cases followed by nausea, sensitiveness, tympanitic, but sometimes dull swelling of the epigastrium. There is prostration and extreme collapse, frequent low fever; feeble, slow at first but soon quickening, pulse; obstinate constipation for

several days, is the rule, but diarrhea sometimes occurs. If the case does not end fatally, in the course of a few days, recovery is possible or a recurrence of the symptoms in a milder form takes place and the characteristics of subacute peritonitis develop."

The diagnosis is seldom made before operation and sometimes not even then. The pancreas is not as accessible as some of the other abdominal organs, but easily felt when one gets accustomed to examining it as a routine in doing upper abdominal operations. When normal it is smooth and small, but when diseased may have what has been termed the "corn-cob feel" and reach considerable size. One author says that the symptoms are so characteristic that an early diagnosis should be made in nearly every case. It does not appear that easy. However, a correct diagnosis of pancreatic stones has been made in a large number of cases. Sometimes it is hard to distinguish between carcinoma and infection at the head of the pancreas. Jaundice is seldom present.

Differential diagnosis: gallbladder disease, perforation of stomach or duodenum, gangrenous appendicitis, peritonitis of unknown origin, ileus, mesenteric thrombosis, and urethral colic should be distinguished from pancreatitis.

In making a physical examination it is well to work up to the pancreas—that is, to begin palpating and percussing all over the abdomen and gradually to lead up to the pancreatic area; in this way one will be able to distinguish where the maximum degree of tenderness is.

Hemorrhage is not only serious in itself, but the blood forms with the pancreatic juice an excellent medium for bacteria. The pancreatic juice, of which 500 to 800 cc. is formed daily, provokes and leads to peritonitis and also dissolves the blood clots in and around the severed blood vessels and restarts hemorrhage. Great care should be exercised not to injure the pancreas when operating on other abdominal viscera. The pancreas is best reached by going through the gastrocolic ligament. One may reach the pancreas by going through the transverse mesocolon, after displacing the colon upwards, as



in performing gastroentrostomy. This route is not so good for drainage. The pancreas may also be reached by going through the lesser omentum and displacing the duodenum. This route is dangerous on account of hemorrhage and because the drainage is bad. One may reach the pancreas by going through the deodenum.

#### Report of Cases

Case 1.—A boy, aged 16, who had been sick ten days, was seized with upper abdominal pain. There was tenderness over the gallbladder region, the temperature was 104, the leukocyte count 34,000. The opinion was that he had typhoid fever which had involved the biliary tract. At operation there was a big blue gallbladder and the pancreas was enormously enlarged. There was no fat necrosis. The gallbladder was drained. The temperature was normal two days after operation and remained so. After a long drainage, the patient made a complete recovery, and was well two years later. The diagnosis was subacute pancreatitis.

Case 2.—A man, aged 19, became suddenly ill and was brought to the hospital late at night. He was in great pain and shock. The temperature was 103, the leukocyte count 22,000; there was extreme tenderness in upper abdomen. I operated early the next morning and found a big gallbladder, a perforating duodenal ulcer, and a large pancreas. The perforation in the duodenum was closed, and the gallbladder drained. The patient left the hospital in three weeks, but drainage continued for some time afterwards. A year later, he was well. The diagnosis in this case were: cholecystitis, perforating duodenal ulcer, acute pancreatitis.

Case 3.—A woman, 25 years old, had been sick two days with mild pain and tenderness over the gallbladder region; pulse and temperature were a little above normal, and the leukocyte count only slightly increased. At operation the gallbladder was moderately enlarged. The pancreas, which was large and fluctuant was examined through the gastrocolic ligament; punctures were made and fluid, the color of beef broth, escaped. Drains were put in the pancreas and the gallbladder drained. The patient gradually got worse and died on the fifth day. The diagnosis was acute hemorrhagic pancreatitis.

Case 4.—A colored man, aged 32, had a large mass above his stomach. As the stomach was normal, I decided that he had a pancreatic cyst. The cyst was drained, and the patient made an uneventful recovery. I have never seen or heard from him since. The diagnosis was cyst of the pancreas.

Case 5.—A man, aged 22, had had upper abdominal pain off and on for a year which was typical of gallbladder disease. He had had his appendix removed ten years previously. The temperature and leukocyte count were only slightly increased. A diagnosis of gallbladder disease was made. At operation the gallbladder had some adhesions around it and its walls were rather

thick. The head of the pancreas was about 6 cm. in diameter and had plastic fibrin around it. It was approached through the gastrocolic ligament. It looked like an abscess, but aspiration in several places was negative. The gallbladder was drained for two and a half months. He made a good recovery and when last seen was still well. The diagnosis was acute pancreatitis.

Case 6.—A man, aged 45 had had his appendix and gallbladder removed four or five years previously. He had had pains in upper abdomen; he was nauseated and he vomited a good deal of the time. As he did not improve, I operated and cleaned up the adhesions around the common duct. The common duct was three times its normal size. The head of pancreas was considerably enlarged. A T-tube put in the common duct and kept two months. The last I heard of this patient he was free of nausea, vomiting and abdominal pain. The diagnosis was chronic pancreatitis.

Case 7.—A woman, aged 28, had previously suffered hysterectomy, appendectomy, and cholecystectomy. The temperature, pulse and leukocyte count were normal. Nausea and vomiting were the prominent symptoms. There was pain and tenderness in upper abdomen, and a ventral hernia in the lower abdominal wall. A mass of adhesions was adherent to the lower abdominal wall. The hernia was repaired and adhesions released; the pancreas was somewhat enlarged and had the "corn cob feel." A T-tube was put in the common duct. After prolonged drainage, the patient made a complete recovery, and has remained well for a year. In operating on pancreatic cases in which the gallbladder has to be or has been removed, drainage of the common duct with a T-tube is advisable. The diagnosis in this case was chronic pancreatitis.

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ANTITOXIN TREATMENT OF  
ERYSIPELAS\**Case Reports*

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*Macon*

Specific antitoxin serums for use in the treatment of hemolytic streptococcic infections have been sought since the demonstration by Fehleisen<sup>1</sup> in 1882, that a streptococcus was the etiologic agent in erysipelas. At first, efforts were devoted to the production of polyvalent serums, since it was recognized that there were many strains of hemolytic streptococci. The first monovalent serum was produced in 1895 by Charrin and Rogers<sup>2</sup>. Use of their serum, however, failed to prove it of value, a fate which befell the efforts of many other investigators during the next twenty-five years. Success was first attained by Dochez,<sup>3</sup> who, in 1919, demonstrated that a specific type of streptococcus was the etiologic agent in scarlet fever and gave to us scarlet fever antitoxin serum, the value of which is well established. The next advance was the introduction by Birkhaug,<sup>4</sup> in 1926, of an antitoxin serum for the treatment of erysipelas. Recently there has been introduced an antitoxin serum for treatment of puerperal sepsis, the merits of which have not been determined. It is the purpose of this paper to present a review of the experiences others have had with erysipelas antitoxin serum and to report a few cases of my own in which I have used it.

Birkhaug's work was based upon preceding investigations by several workers, who, by means of opsonic and agglutination studies, suggested that a specific strain of hemolytic streptococcus was the etiologic agent causing erysipelas and that streptococci isolated from scarlet fever, cellulitis, erysipelas, and septicemia fell into individual groups. Working from that point, Birkhaug demonstrated by agglutination and absorption tests that 91 per cent of erysipelas strains of

hemolytic streptococci, isolated carefully from typical erysipelatos lesions, fell into one group, and that by the same method this group of streptococci could be readily differentiated from strains of streptococci isolated from scarlet fever, empyema, cellulitis, peritonitis, sinusitis, tonsillitis, or puerperal sepsis. With the known fact that a monovalent streptococcic antiserum will protect against the streptococcus used in its production, the rationale of an erysipelas antitoxin serum was based upon experimental facts.

The first clinical report on the use of this serum was made by Birkhaug<sup>4</sup> in 1926. He treated sixty patients suffering from erysipelas, with only two deaths. From the results he obtained his conclusions were: (a) that the etiologic agent in erysipelas is a specific type of hemolytic streptococcus; (b) that the serum produced with this type organism possesses very marked curative properties when used early in the disease, and (c) that administration of the serum during the first three days of the disease caused a prompt amelioration of the toxic depression, a critical fall of the temperature and pulse rate, and a prompt fading of the erysipelatos lesions. He found that in late cases repeated injections may be necessary to neutralize completely the circulating toxin in the patient's blood. In these late cases following each injection of the serum there was a critical drop in the temperature and pulse in twelve to eighteen hours after the injection, but the symptoms frequently returned and a second or third dose was necessary.

One year later Symmers and Lewis<sup>5</sup> reported 131 cases treated in the isolation ward of Bellevue Hospital. As a control, every other case of erysipelas admitted to the ward was treated with antitoxin and every alternate case was treated by methods which had been followed for years. Their report shows that patients treated with serum remained in the hospital 53 per cent less time than those treated by other methods. The mortality for the 131 cases treated with serum was 5.3 per cent as compared with 10 per cent mortality in 15,277 cases treated in Bellevue during the preceding twenty-three years. They con-

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cluded that treatment with antiserum produced results commensurate with those obtained in the treatment of diphtheria with antitoxin.

Musser,<sup>6</sup> of New Orleans, in the same year reported thirty-one cases, with only two deaths; one death, however, was attributed to cardiac disease. His conclusion was that the results obtained were definitely and un-failingly good.

McCann,<sup>7</sup> of Rochester, N. Y., reported 117 cases, sixty-nine treated with erysipelas serum, twenty-three with scarlet fever serum, and twenty-five without serum. Analysis of his results shows no decrease in mortality, duration of the fever, or of the stay in the hospital. His conclusions were unfavorable.

One year ago Symmers<sup>8</sup> reported 705 additional cases from Bellevue Hospital in which the results were even better than his former report. Here are the statistics:

Percentage of deaths in cases treated with serum.....	5.6
Percentage of deaths in cases treated without serum.....	11.
Average stay in hospital in cases treated with serum.....	4.6 days
Average stay in hospital in cases treated without serum.....	11.4 days

These figures show a reduction in deaths of 45 per cent and of the stay in the hospital of 60 per cent.

On the other hand, Symmers<sup>8</sup> calls attention to the fact that the serum does not confer immunity, diminish the incidence of complications, nor the occurrence of sequelae. In a small number of cases serum sickness developed, usually two to seven days after the injection and, though never serious, always an annoyance. No cases of anaphylaxis occurred.

After reading this favorable report we, at the Baltimore City Hospitals, decided to use the serum. We made no attempt to run control cases as we considered the treatment beyond the experimental stage. Concentrated erysipelas streptococcus antitoxin was used. We found that when given early in the disease the temperature nearly always showed a prompt decline, the lesions spread no further and the patient appeared less toxic. Impressed

with the results we obtained, I decided to carry the use of the serum treatment into private practice, and I have here the report of two cases recently encountered.

#### *Report of Cases*

Case 1.—W. M. J., a white man 56 years of age, a traveling salesman, was taken suddenly with a chill and fever, pain in his joints and spine. When seen a few hours later his temperature was 103, leukocyte count 15,000; physical examination was negative except for an erysipelatous area on the medial surface of the right tibia. The patient appeared quite toxic. When seen twelve hours later the lesion had extended, temperature was 103, and patient was very restless. At this time 10 cc. concentrated erysipelas antitoxin was given intramuscularly. There was a very prompt fall in temperature, no further spread of the lesion, the general condition of the patient rapidly improved, and one week later he was able to resume his work.

Case 2.—O. H. W., white, male, who developed erysipelas following streptococcal infection in the left index finger which extended up the arm and was drained just below the axilla. Erysipelas developed suddenly and extended from the axilla to the wrist. Simultaneous with its development there was a sharp rise of temperature to 103. Thirty-six hours later erysipelas antitoxin serum was given intramuscularly, but as the temperature had begun to decline there is some doubt in this case as to just what part the serum played, but following its administration the temperature quickly returned to normal and there was no further spread of the lesion.

#### *Conclusions*

1. A review of the literature shows that favorable results are being obtained by treating erysipelas with antitoxin serum.

2. There are no contra-indications or dangers in administering the serum. Serum sickness, which develops in a small percentage of cases, is never serious.

3. A few cases show no response to serum treatment.

4. When we recall the statement made by Tileston<sup>9</sup> in 1921 that "all conceivable methods of treatment of erysipelas have been tried and none can be said to be of proved benefit" we should welcome any form of therapy that will lower the mortality and morbidity of this infectious disease.

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## AUGUSTA

*The City of Hospitality*

The Eighty-First Annual Session of the Medical Association of Georgia will long be remembered by all those so fortunate as to be present. Many cities of Georgia have lavishly entertained the Association, but it remained for Augusta to surpass them all. The Richmond County Medical Society, officially, and the members, unofficially, did everything within human power to make the visiting members and their families enjoy every moment of their stay in Augusta. The members in Augusta literally deserted their offices and work to give personal attention to the minutest details to see to it that everything connected with the Session went off smoothly.

The scientific program was carried out in full. Every essayist on the program was called upon and heard at his appointed time—only one being unavoidably absent. Our invited guests had large, attentive, and enthusiastic audiences. They brought us real worthwhile messages.

The annual banquet was elaborate in conception and the addresses concise, timely, and entertaining.

Augusta has long been known as a center of culture and medical knowledge, but this meeting gave it a new and well-deserved name—*The City of Hospitality*.

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"HE WOULDN'T BUT HE WOULD," an original health play written and produced by the eighth grade of Dixie Consolidated School, Dixie, Ga., won the first prize of \$50.00 given by the Georgia Tuberculosis Association in the Georgia Health Play Contest.

PRESIDENT MOORE TAKES  
THE HELM

Our new President, Dr. George Young Moore, has taken charge at a very important time in the history of the Association. His training and experience eminently qualify him to fulfill this most important office for the greatest benefit to the members of the Association and the public.

Dr. Moore was born in Laurens, S. C., on March 4, 1868; was graduated from the Medical Department of the University of Georgia in the class of 1888; practiced in South Carolina and at Elberton, Ga., for several years and finally located in Cuthbert, Ga., in January, 1898. He was a charter member of the Randolph County Medical Society, served as Censor and as President and was then elected Secretary for life. He was elected a member of the Council of the Medical Association of Georgia, representing the Third Congressional District in 1927 which position he filled until his election as President-Elect last year.

For several years Randolph County Society has headed the Honor Roll of the Association and the Third District Society was the first to attain the rigid requirements of the Honor Roll. These accomplishments were due more to the efforts of Dr. Moore than any other one individual. No man has ever been more tireless and persistent in his efforts to secure every eligible man as a member of his county and district society.

His greatest achievement, however, was when he secured the beautiful, charming, and talented Miss Margaret L. Oglesby, of Elberton, as his life partner in April, 1898. Mrs. Moore is loved and admired by all who know her and she makes an ideal partner for our leader during the next year.

Let every member of the Association renew his determination to do everything within his power to assist our new President in carrying forward all the activities of the Association.

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The second prize of \$25.00 for an original health play, entitled "Melba Toast," was won by the Waycross High School. It was given by the Junior and Senior High School of Atlanta.



## SCOPE AND AIM OF COMMITTEE ON COST OF MEDICAL CARE

At the spring meeting of the Committee on the Cost of Medical Care in Washington, May 2 and 3, 1930, a special committee of private practitioners was appointed to consider the relation of the committee to the private practitioners of the country. This committee, composed of the undersigned members, now submits the following statement for the information of these practitioners on the scope and aim of the committee's work.

It was clearly recognized by all present at the spring meeting that the committee has undertaken a program of studies which in its scope goes far beyond that part of the cost of medical care which physicians provide. The expense of several other kinds of service now looms large in the total cost of many illnesses. In addition, special emphasis was given at the meeting to the question of the adequacy of the various services available in a community. Finally, the committee adopted a statement of three fundamental principles proposed by the Chairman, which should go a long way toward reassuring those who have been apprehensive regarding the nature of the committee's ultimate recommendations.

### I.

The committee is interested in far more than the physician's bill, which, in many instances, is considerably less than half the total cost of illness. Hospital care, nursing, dentistry, laboratory examinations, and medicines often involve considerable expense, as is clearly shown by several of the committee's studies which are now being completed or have already been reported upon. In one middle western county recently surveyed, the expenditures for various kinds of medicines constituted over one-third of the total expense for medical care, and were 20 per cent greater than the costs of physicians' services. It is also becoming apparent that a great deal of money is being spent for useless medicines and for various irregular forms of treatment which do the patient no good or which may result in positive harm.

In order to indicate clearly the broad scope

of the committee's work, it was decided at the spring meeting to make a slight change in its name. The word "cost" is to be changed to "costs." The complete name of the committee, with subtitle, will henceforth be "The Committee on the Costs of Medical Care—Organized to Study the Economic Aspects of the Prevention and the Care of Sickness, including the Adequacy, Availability, and Compensation of the Persons and Agencies Concerned."

One vital problem before this committee, declared a prominent physician member, at the recent meeting, is the determination of what is reasonably adequate care. In many cases of obscure disorders and serious illness, expensive facilities are essential. Presumably, there must be available in the community well trained general practitioners, certain specialists, dentists, nurses, hospitals, and health agencies—trained and well equipped to do their part in providing all the care that the individual may need. A plan of the executive committee, to conduct a study to determine standards of adequate medical care, under the general direction of some well-known competent physician and with the assistance of a committee of fifteen or twenty other physicians, was heartily endorsed at the meeting of the general committee.

The aim of the committee is to study the problem described by Dr. Olin West, Secretary of the American Medical Association, as the one great outstanding problem before the medical profession today. This, he says, is that involved in "the delivery of adequate, scientific medical care to all the people, rich and poor, at a cost which can be reasonably met by them in their respective stations in life." The committee is endeavoring to establish a foundation of facts which have an important bearing upon this problem. On the basis of these facts, it will propose recommendations for the provision of adequate and efficient therapeutic and preventive service for all the people at a reasonable cost to the individual, which, at the same time, will provide physicians, dentists, nurses, hospitals and other agents assurance of adequate return. This is not a new statement of aim.

Recent discussion, however, has given new emphasis to certain aspects of it. There are important items in the cost of sickness other than the physician's bill; and the adequacy of the service provided must be considered. The program of studies is a comprehensive one. It deals with questions of supply, demand, distribution and costs of all kinds of services, both preventive and curative; the relation of these costs to other expenses; the return accruing to the practitioners and various agents furnishing medical services; and especially will it seek to determine what standards of adequacy may reasonably be expected.

## II.

Dr. Ray Lyman Wilbur, Chairman of the Committee, proposed at the meeting May 2nd a statement of three fundamental principles for the consideration of the committee. This statement was referred to each of four subcommittees which held sessions during the two-day meeting. The entire committee, at its last session, May 3rd, adopted with a few verbal changes the three principles. These will be of special interest to the physicians and dentists. They follow:

1. *The personal relation between physician and patient must be preserved in any effective system of medical service.*

Medical service is and doubtless, by its very nature, must remain a distinctly personal service. Even in this age of standardized commodities for the table, ready-to-wear clothing, and interchangeable spare parts for all types of machines, there has been no plan suggested for the reduction of medical diagnosis and treatment to basic units which can be ordered from traveling salesmen or acquired through correspondence courses. The physician must see his patient and see him, in many cases, over an extended period of time if the diagnosis and treatment are to achieve the greatest possible accuracy and efficiency. There is no substitute for personal observation.

Man is not a standardized machine and each individual reacts to the conditions of life in a manner in some respects unique. In the treatment of disease, this individual variation is a factor of great significance and can receive due consideration only when the practitioner has known the patient for a considerable time and maintains a personal relation with the patient.

2. *The concept of medical service of the community should include a systematic and intensive use of preventive measures in private practice and effective support of preventive measures in public health work.*

The cost of adequate curative treatment is now high and may continue to increase as expensive procedures resulting from scientific progress become more widely used. Sickness, in addition, involves other personal and social costs, some of which cannot be measured in monetary terms.

The outstanding achievements in scientific medicine have been made in the preventive rather than the curative field. Knowledge now available for the control of malaria, tuberculosis, smallpox, diphtheria, pellagra, typhoid fever, hookworm disease, and goiter, if effectively applied, would make unnecessary a considerable proportion of expense.

3. *The medical service of a community should include the necessary facilities for adequate diagnosis and treatment.*

From the standpoint of effective diagnosis, many diseases, such as tuberculosis, cannot be recognized promptly in their early stages without the aid of elaborate technical equipment. From the standpoint of adequate therapy, if the best of modern technique is not immediately available, complete cures are either delayed or rendered impossible of attainment. To cite a specific illustration of the improvement of modern therapeutic procedures over those of ten years ago, the time required for treatment of fractures of the hip, and the percentage of permanent invalidity resulting from that injury have each been reduced by more than half.

## SPECIAL COMMITTEE OF PRIVATE PRACTITIONERS

Stewart R. Roberts, M.D., Chairman.  
 Walter P. Bowers, M.D.  
 A. C. Christie, M.D.  
 Haven Emerson, M.D.  
 George E. Follansbee, M.D.  
 M. L. Harris, M.D.  
 J. Shelton Horsley, M.D.  
 Kirby S. Howlett, M.D.  
 Arthur C. Morgan, M.D.  
 Herbert E. Phillips, D.D.S.  
 C. E. Rudolph, D.D.S.  
 Richard M. Smith, M.D.  
 N. B. Van Etten, M.D.



## EMORY ACQUIRES VESALIUS. "DE HUMANI CORPORIS FABRICA"

Through the generosity of members of the faculty, student body and friends, The A. W. Calhoun Medical Library of Emory University has acquired a copy of one of the most highly prized books in all medical history, Vesalius "De Humani Corporis Fabrica" ("On the Structure of the Human Body"), by Andreas Vesalius, printed in June, 1543, in Basle, Switzerland. The presentation exercises were held in the auditorium of the Wesley Memorial Hospital at 8 p.m. on May 27th. The following program was rendered:

1. Anatomy Before Vesalius—Dr. J. Calvin Weaver.
2. Andreas Vesalius (1514-1564); a sketch of his life—Merrill Wattles, Emory University School of Medicine, Class of '33.
3. Presentation of Vesalius, *De Humani Corporis Fabrica*, 1543, to the A. W. Calhoun Medical Library—Dr. Dan C. Elkin.
4. Acceptance of Vesalius, *De Humani Corporis Fabrica*, 1543, for the A. W. Calhoun Medical Library—Dr. Russell H. Oppenheimer, Dean, Emory University School of Medicine.
5. The Published Works of Vesalius (illustrated with lantern slides)—M. Myrtle Tye, Librarian.
6. The Influence of Vesalius—Dr. Stewart R. Roberts.

## GEORGIA "HEALTH WEEK", ITS SIGNIFICANCE TO THE PEOPLE

Let the people of Georgia take due advantage of their opportunities in "Health Week" May 5-10, and they will add beyond measure to their welfare and happiness and to the State's prosperity and upbuilding. These days are dedicated to the advancement of public intelligence and the quickening of public conscience on a basic truth of efficient and contented living. The wish of the wise Roman of old for a sound mind in a sound body ought to be a prime purpose of every citizen and every commonwealth, for on this depends the justness of social relations no less than the usefulness and joy of the individual life. Sound bodies and sound minds will do more than anything else, within the compass of man's effort, to eradicate poverty, to control crime, and to lessen "the heartache and the thousand natural shocks that flesh is heir to," and they will do much, be-

sides, to foster the finest energies and achieve the noblest hopes of the human spirit.

Hence it is a high obligation of the community to combat disease, to promote health, to safeguard the right of every child to grow up amid wholesome surroundings and to be relieved of physical handicaps which medical or surgical art can remove. Epidemics once regarded as visitations of Providence are now known to be results of man's own carelessness and often of governmental neglect. Typhoid fever is a disgrace to any town and a rebuke to the town's officials. Malaria need not be; the losses it entails, the suffering it inflicts can be prevented by means so simple that failure to employ them is inexcusable.

While the duty of extirpating such ills and of controlling contagious maladies is primarily a public one, that of remedying defects of children, such as bad teeth, infected tonsils, adenoids and graver infirmities, is largely one for the home. Atlanta and Fulton County parents owe it to their little ones to co-operate earnestly with the inspections which will be conducted this week at forty-three elementary schools for the benefit of children of pre-school age. This good work, under auspices of the local Parent-Teacher Association, is to be the county's chief contribution to Georgia Health Week, and as such should be given especially cordial support in all the boroughs and neighborhoods of Atlanta.

There will be many other admirable projects in the campaign of education and of direct service, designed to arouse and to instruct the people in matters of hygiene as a preventive of disease and a power for useful and happy living. Good citizenship and self-interest alike bid everyone bear a part in this most praiseworthy undertaking. The Medical Association of Georgia and its numerous subdivisions, the State Board of Health, and the Parent-Teacher Associations which are sponsoring "Health Week" deserve the thanks of all Georgians—not only the thanks, but the wholehearted support. — *Atlanta Journal*, *Atlanta*, May 4, 1930.

## SELECTION OF DRUGS IN HOSPITALS

The hospital, as one factor in medical education, should afford unusual opportunities for enhancing rational drug therapy. There particularly may products be submitted to critical inspection. As Sollmann so pointedly remarked at the recent Congress on Medical Education, the "evaluation of therapeutic remedies is not usually among the features to which hospital authorities point with just pride of achievement." The hospital drug room, which reflects directly the medicinal requests of the staff, has hardly kept pace with the



modernization of other departments of the hospital. As for proprietary medicines, the shelves often remind one of what Irons aptly terms the "chain drug-soda-fountain-lunchroom." In most medical colleges today, the student receives good courses in pharmacology, materia medica and therapeutics. He is taught about pharmacopeial drugs. The fallacies of shotgun prescriptions are frequently emphasized. More than five thousand copies of New and Nonofficial Remedies are used annually by Class A colleges in order that medical students may know what nonofficial remedies are worth while. Although proprietaryism has at times imposed evils on the profession, sight must not be lost of the fact that progress in drug therapy is rapid and that the physician must use the new drugs, which most frequently are proprietary. The really valuable products are introduced only after critical examination and are sold in accordance with the procedure established by the Council on Pharmacy and Chemistry. Thus the medical graduate may exercise, if he will, good judgment in the matter of selection of drugs.

Unfortunately, progressive "teaching" methods are not carried out in the hospital where the graduate is an intern. Not infrequently, irrational fixed prescriptions are written by the "chief" of a service, who in turn may have had them bestowed on him when he was an intern. The staff physician may carelessly prescribe a drug under a name he remembers best. Frequently drugs continue to be prescribed under their proprietary names long after pharmacopeial preparations have become available. Thus the official drug methenamine may be ordered by one of its aliases—also more costly—such as urotropin or formin.

Competition introduces other evils. Each pharmaceutical house, for instance, has a hypnotic of the barbitol series; about fifteen are on the American market. These hypnotics in general differ little in therapeutic effect, but add materially to the hospital drug list and expense. They also cause the prescribing physician or intern to lose sight of the official, nonproprietary barbitol or phenobarbital. Interns are likely also to acquire such habits of prescribing from attending men.

Many of these objectionable drug practices were emphasized recently by E. E. Irons. One of the suggestions which he offered to mitigate the bad habits of proprietary prescribing in hospitals is the issuance of a hospital manual. This, he believes, should contain hospital rules and a formulary, suitably interleaved for the insertion of special rules and formulas of merit desired by individual hospitals. The Council on Medical Education and Hospitals, in cooperation with the Council on Pharmacy and Chemistry, is following up the suggestion and considering the preparation of such a manual. This will furnish interns with helpful, disinterested information, approved by hospital staffs. The correction of bad habits in prescribing will go far toward eliminating confusion, improving medical education of interns and nurses, and finally aid economically those most affected—the hospitalized public.—*Jour. A.M.A.*, May 31, 1930.

## COMMUNICATION

Recently a neighboring doctor was invited to my town to talk to a civic club. He chose "Corrective Medicine" as his topic and demonstrated before and after correcting pictures which left lasting impressions of not only physical improvements, but also moral and spiritual growth. He has struggled along for years through testing trials, as you and I have, steadfastly refusing to strike back when biting remarks, often thoughtlessly made, irritated. Thus he emerged from the bread line, where doctors, and laymen, too, pitch most of their battles. He smiled, cheered us doctors, and we smiled and cheered back. The club and our visitor feel better, and I am better.

J. A. REDFEARN, M.D.

Albany.

### FATAL HEPATOGENIC HYPOGLYCEMIA FOLLOWING NEOARSPHENAMINE

The syndrome of hypoglycemia was brought to popular attention by observation of the effects of overdoses of insulin. It is essentially the same whether of this or of spontaneous origin. The first proved occurrence of severe hepatogenic hypoglycemia without other clinical signs of hepatic disease was reported in November, 1929. The case reported by John Brunson Cross and L. Minor Blackford, Atlanta, Ga. (*Journal A.M.A.*, May 31, 1930), is probably the second. It is, they believe, the first report with necropsy of a clinically recognized case of extreme hypoglycemia following the administration of one of the arsenical compounds. Early recognition of hepatogenic hypoglycemia with the administration of adequate amounts of sugar by mouth and by vein, and of calcium intravenously, may save life.

### ANTITOXIN TREATMENT OF ERYSIPELAS

(Continued from Page 246)

5. Additional cases are reported which responded favorably to serum treatment.

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## WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

President.....	Mrs. Chas. C. Harrold, Macon	Recording Sec.....	Mrs. J. Cox Wall,, Eastman
President-Elect.....	Mrs. Ralston Lattimore, Savannah	Cor. Sec.....	Mrs. Wm. R. Dancy, Savannah
First Vice-President.....	Mrs. S. T. R. Revell, Louisville	Treasurer .....	Mrs. Ben Bashinski, Macon
Second Vice-President.....	Mrs. W. W. Battey, Sr., Augusta	Parliamentarian ..	Mrs. A. H. Bunce, Atlanta
Third Vice-President.....	Mrs. J. E. Penland, Waycross	Editor.....	Mrs. C. W. Roberts, Atlanta

### SIXTH ANNUAL SESSION

The sixth annual meeting of the Executive Board of the Woman's Auxiliary to the Medical Association of Georgia met at the Walton Way Apartments, in Augusta, on Wednesday morning, May 13, 1930. This meeting was called to order by the President, Mrs. Marion T. Benson, of Atlanta.

Mrs. W. W. Battey, Sr., President of the Auxiliary to the Richmond County Medical Society, gave to the visitors a sincere, cordial greeting in her address of welcome.

At the request of Mrs. Benson, Mrs. Allen H. Bunce served as Recording Secretary, the elected Secretary, Mrs. Lee Howard, of Savannah, being ill and unable to be present. The minutes of the last Executive Board meeting were read and approved.

The President stated that the most urgent business to come before the board was the consideration of an educational fund for medical students. Mrs. Bunce, as chairman of the Resolutions Committee, read the address which Dr. William R. Dancy, of Savannah, gave at the annual meeting of the Auxiliary in Macon last year. Since the Auxiliary had not voted on whether we should have a student educational fund, Mrs. Bunce stated that a committee should be appointed to consider Dr. Dancy's suggestions and present to the general body on Thursday morning a more practical outline for this work. Mrs. Benson appointed Mrs. J. N. Brawner, chairman, Atlanta; Mrs. C. W. Roberts, Atlanta; Mrs. W. H. Myers, Savannah; Mrs. C. C. Hinton, Macon. Mrs. Brawner immediately requested that Mrs. Bunce be made chairman of this committee as she was thoroughly acquainted with all phases of this plan and her advice was inestimable.

Mrs. C. W. Roberts asked if the present assembly might vote on whether we should have a state student educational fund in order that discussion be allowed. Informal discussion followed the affirmative vote. Dr. Dancy was then introduced to the Assembly and gave another address on this subject—the new suggestions being that local auxiliaries now having a trust fund should edu-

cate boys in high school or pre-medical, this boy later being financed by the State Auxiliary. He urged members to solicit donations outside the medical profession, stating that he had already asked the aid of Henry Ford, which, however, was refused. After closing his address Dr. Dancy offered to answer any questions asked. General discussion followed Dr. Dancy's leave which resulted in considerable confusion of ideas until Mrs. Bunce quite tactfully disposed of all questions by referring them to the committee.

The next order of business was the appointment of special committees by the President. The Nominating Committee consisted of the following:

Mrs. C. W. Roberts, Atlanta, Chairman.  
Mrs. J. A. Selden, Macon.  
Mrs. C. E. Waits, Atlanta.  
Mrs. W. A. Mulherin, Augusta.  
Mrs. W. J. Cranston, Augusta.  
Mrs. George Massenburg, Macon.  
Mrs. Ralph Freeman, Hoschton.

The Complimentary Resolutions Committee is as follows:

Mrs. Ralston Lattimore, Chairman,  
Savannah.  
Mrs. W. A. Selman, Atlanta.  
Mrs. Jack Landham, Atlanta.

This concluded the business of the first day and the Assembly adjourned.

The Partridge Inn was kept open for the convention and all our meetings were held across the street from this hotel. Registration, exhibits, general public meetings and informal dances were all held at the Partridge Inn.

Wednesday afternoon we were given the rare treat of seeing two gardens on the Hill. We were first driven to the Bourne Gardens and, once we stepped inside, each flagstone brought us to a different view of beauty. The grass was so green and the edges so even that it reminded me of the old English gardener's method for obtaining a perfect turf—that ye sow and weed, and weed and sow for 500 years and from then on weed and sow eternally. Dwarf boxwood edged the grass plots; summer houses with swings,



chairs, and tables, and screened by priceless old shrubbery appeared at the ends of flagstone walkways. Pools and fountains surrounded by thousands of pansies and boxwood gave to the garden life and joyousness to balance the cool serenity and the dignity of the oak trees, and the rare old magnificent shrubs. The house I cannot tell you about, except for the terrace at the beginning of the garden. I know the doorway had a star jasmine by its side covered with blossoms. But the house itself I do not remember seeing, the garden was so overwhelmingly beautiful.

The second garden was the Chafee home. It was fairyland—exquisite in color. Blue and pink larkspur, pastel shades of gladioli and the irises grew lavishly in beds together. Rambler roses covered the little house in the midst of all this beauty, and it was the chauffeur's house. The home that belongs to this garden is so charming, so simple, with its old white boards that it seems as if it grew there, too. I could not help but peep into a window that opens out on the walkway, for just inside set the most beautiful antique chair with its satiny finish. Our hostess was looking in, too, and she told us that the entire furnishings of the little white house were family heirlooms. The owner of the charming garden was away at one of her three other homes. The drive ended at Mrs. George Traylor's home, where tea was served. The weather was ideal and beautifully appointed tables were placed on the lawn and terrace.

After dinner the Little Theatre League of Augusta put on an extremely clever skit, "Suppressed Desires," which was truly a treat. An informal dance followed at the Partridge Inn.

Thursday morning the General Assembly met at 10 o'clock at the Walton Way Apartments. Mrs. Benson presided. Dr. M. M. MacFerrin gave the invocation.

Mrs. J. E. Penland read the Parliamentary rules governing our Assembly.

Mrs. Peter Wright gave the following report of the Registration Committee:

Delegates .....	28
Visitors .....	45

Total .....	73
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Money Collected .....\$53.00

Mrs. W. J. Cranston gave an address of welcome. Besides making us feel that Augusta was most happy to have us there, Mrs. Cranston made an eloquent appeal to the members of the auxiliary, not to forget, in our meetings when the details of routine aux-

iliary work absorb so much of our interests and thoughts, the main purpose and high ideals on which our organization is based. She illustrated so clearly that the profession of medicine runs hand in hand with the ideals of Christianity.

Mrs. Stewart D. Brown, of Royston, responded to this address with an interesting talk.

Mrs. Cox Wall gave a report of the Miami meeting.

Mrs. Brawner and Mrs. Bunce delighted the audience with a humorous sketch of their trip to Portland with a more serious thought added at the last. They told us quite sincerely that the Southern auxiliaries plan the business meetings, the pleasures, and the comforts of their guests so well that in no other part of the United States have the auxiliaries equaled them in hospitality.

Mrs. A. H. Bunce read the minutes of the last annual meeting. They were approved.

Dr. G. Y. Moore, President-Elect of the Medical Association of Georgia, was presented and he gave an interesting talk on what our auxiliaries could do in the aid of Child Welfare, Health, and Protection and without any cost whatsoever. He advocated the student's educational fund, but stressed more earnestly the need of the children for more intelligent help on health matters. And that, he suggests, is the work we should do.

Mrs. J. N. Brawner's greeting to the Assembly in behalf of the Auxiliary to the Southern Medical Association, of which she is President, was instructive and beautifully expressed. She reminded us that six years ago in Augusta our State Auxiliary was formed and that there were six charter members present at this annual meeting. These members were asked to stand and the minutes of this first meeting were read.

Mrs. C. E. Waits, treasurer, made the following report:

Balance from 1928 .....	\$ 74.01
Dues for 1929 .....	288.75
Interest .....	8.20
Contributions from local auxiliaries for student fund .....	397.00
Total collected .....	\$767.96
Loaned to student at Emory University .....	300.00
Expenses for year .....	158.75

Balance on hand.....\$309.21

Of this amount \$97.00 belongs to the Student Fund, leaving a balance of \$212.21 in the State Auxiliary treasury.

Mrs. C. C. Harrold reported on organiza-



tion work, stating that while much had been accomplished there was still considerable work to be done by the local auxiliaries to interest wives of the doctors not belonging to the Auxiliary in their district.

Mrs. J. A. Selden, Chairman of the Health Film Committee, told us of many interesting things that had occurred during the past year in connection with her health film work—one of which was that she sat next to Will Hays for four days in New York discussing health films. He has promised her unlimited aid in filming health scenes and she has asked the women to write scenarios on child health problems and submit them to her. These will be filmed and shown throughout Georgia. This committee is doing excellent work and her report was one of the most interesting heard at the meeting.

Mrs. W. H. Garrison, of Clarksville, gave the report of the corresponding secretary.

Mrs. Marion Benson, President, reported on the work accomplished by the State. Next to Texas we have the largest membership in the Southern States. She also told us of the work done in regard to the Student Educational Fund. This work was accomplished under adverse circumstances this past year, yet they succeeded in sending one boy through the Freshman year at Emory University, where he has been one of the leaders of his class.

Mrs. Selden presented Mrs. Benson with a lovely corsage with the good wishes and love from the members of the Auxiliary to the Medical Association of Georgia.

The report of the Committee of the Student Educational Fund was called for and Mrs. Benson read the following:

1. This fund shall be called "The Student Educational Fund."

2. The purpose of this fund shall be for the medical education of worthy Georgia boys and girls sufficiently educated to enter medical college.

3. The money is to be loaned at a yearly rate of 4 per cent interest and the amount of the loan shall not exceed what the Deans of our Medical Schools think necessary—that means, of course, the Dean of the Medical School of Emory University and the Dean of the Medical School of the University of Georgia.

4. Supplement, rather than give the entire fund for the year. This is to continue for a period of at least five years.

5. Encourage graduates to stay in Georgia, but do not compel them to do so if by this act we handicap them in their advancement.

6. Money may be obtained from donations outside the Auxiliaries to the medical profession. The County Auxiliaries shall pay a minimum of \$1.00 per capita. It is desired that larger Auxiliaries give

\$2.00 per capita. This money given by the County Auxiliaries may be raised by their organized efforts in any way they desire.

7. The funds shall be administered by a standing committee with chairman elected by general body to serve three years. There shall be a representative from each District Auxiliary, a Treasurer; the President and President-Elect of the State Auxiliary shall be ex-officio members of this committee.

8. Transactions shall be kept and read to the general assembly at its general meeting.

9. Selection of students to be left to the committee subject to approval of the general body.

The Assembly elected Mrs. William Shearhouse, Savannah, as Chairman of the Student Educational Fund of the Auxiliary.

As time was limited, Mrs. Benson asked that all reports of the delegates be turned in for publication in the JOURNAL.

The Nominating Committee submitted the following report:

Mrs. C. C. Harrold, Macon, President.

Mrs. Ralston Lattimore, Savannah, President-Elect.

Mrs. S. T. R. Revell, Louisville, First Vice-President.

Mrs. W. W. Battey, Sr., Augusta, Second Vice-President.

Mrs. J. E. Penland, Waycross, Third Vice-President.

Mrs. Cox Wall, Eastman, Recording Secretary.

Mrs. W. R. Dancy, Savannah, Corresponding Secretary.

Mrs. Benjamin Bashinski, Macon, Treasurer.

Mrs. Allen H. Bunce, Atlanta, Parliamentarian.

Mrs. Ralston Lattimore read the report of the Complimentary Resolutions Committee.

There being no further business the meeting adjourned to meet next year in Atlanta.

The afternoon program consisted of a delightful bridge party at the Country Club. Those who played golf had the courtesies of the club extended to them. Thursday evening at 8:30 the ladies had their banquet at the Blue Moon while their husbands had theirs at the Partridge Inn. Mrs. H. W. Shaw made a charming toastmistress. Many short, snappy speeches were made and a splendid musical program was rendered for our pleasure. At 11 o'clock the Country Club again became the scene of our activities and the annual President's dance began, which lasted till the early morning hours.

MRS. JACK LANDHAM,

*Alternate Delegate.*

### COUNTY AND DISTRICT SOCIETIES COUNTY SOCIETIES 1930 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 5, 1929.
2. Barrow County, Dr. W. L. Mathews, Winder, December 5, 1929.
3. Dougherty County, Dr. I. M. Lucas, Albany, December 28, 1929.
4. Lamar County, Dr. J. M. Rogers, Barnesville, January 6, 1930.
5. Turner County, Dr. J. H. Baxter, Ashburn, February 10, 1930.
6. Monroe County, J. O. Elrod, Forsyth, February 18, 1930.
7. Wayne County, Dr. A. J. Gordon, Jesup, March 20, 1930.
8. Stephens County, Dr. C. L. Ayers, Toccoa, April 2, 1930.
9. Upson County, Dr. R. L. Carter, Thomaston, April 3, 1930.
10. Lowndes County, Dr. Bennett G. Owens, Valdosta, May 5, 1930.
11. Ware County, Dr. W. L. Pomeroy, Waycross, May 21, 1930.

\*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

### NEW MEMBERS FOR 1930

Burpee, C. M., Augusta.  
Guthrie, N. J., Atlanta.  
Hull, J. M., Augusta.  
Norton, E. L., Amsterdam.  
Schwartz, E. W., Augusta.  
Wade, A. C., Augusta.  
Watkins, W. B., Metcalf.

### THE GEORGIA MEDICAL SOCIETY CELEBRATES ITS 126TH ANNIVERSARY

On the night of May 21st the Georgia Medical Society of Chatham County celebrated its one hundred and twenty-sixth anniversary, and on this occasion it was favored by the presence of Dr. John B. Deaver as its honored guest. Dr. Deaver addressed the society upon the subject of "Infections of the Upper Abdomen", which address was a most masterly presentation of the subject, and his presence on this occasion was most inspiring, as was evidenced by the enthusiasm with which he was received.

A banquet was held in the Gold Room of the DeSoto Hotel and many out-of-town guests were present. It was indeed one of the most pleasant gatherings in the history of this ancient and honorable society.

Dr. Robt. V. Martin, the toastmaster, upon introducing the guest of honor, referred to the history of the society which proved to be so rich in tradition, it being the oldest medical society in Georgia, whose membership so heroically served its community when plagues and pestilences were prevalent, and traced the great progress made in health and sanitary conditions through the faithful and untiring efforts of its membership in former days, and urged the present membership to continue to maintain the high standard set by those heroes of the past.

H. H. MCGEE, M. D.,  
*Secretary-Treasurer.*

### SCREVEN COUNTY MEDICAL SOCIETY

The April meeting of Screven County Medical Society was held in their usual quarters Thursday afternoon the 24th. The meeting was well attended and much business gone through. "The Black List" was revised and enlarged as a number had come forward and straightened up. This black list is being revised and enlarged at each meeting. The Screven County Medical Society has decided to no longer work for the able-bodied for nothing. We are willing to take care of the dependent orphan and the dependent widow who has no one to look to; then our duty to humanity ceases.

The landlord will also come in for our consideration: he, too, has got to pay us as regularly as he pays his tenants' fertilizer bill and grocery bill.

We expect to send out in the county 5,000 hand bills so the public will know where the Screven County Medical Society stands, for unfortunately not every one who should takes his county paper.

January 1, 1931, we are going to have a clean slate. That is what the cotton chopper does so far as the other fellow owing him is concerned; that is what the landlord does so far as his moving tenant is concerned; that is what Mr. Merchant does so far as a run for another year is concerned. We doctors, too, have to eat, be clothed, and send our children to school.

SCREVEN COUNTY MEDICAL SOCIETY.

L. Fielding Lanier, Secretary-Treasurer.  
—Sylvania Telephone, Sylvania, Ga.,  
May 2, 1930.

Reputable surgeons may make application for fellowship in the Southeastern Surgical Congress. Additional information may be found on page 260 of News Items.



## COMMUNICATIONS

*To the Editor:*

I am glad to report that the extension course in medical instruction held here this week has been very gratifying to us.

We had a daily attendance of thirty doctors, representing fifteen different counties. The interest was indeed splendid and the men all expressed themselves as being more than pleased with the course.

The Crisp County Medical Society wishes to express to you and others interested in securing this course for us our sincere thanks and to say that we hope this will be a permanent plan with Cordele as meeting place.

GUY G. LUNSFORD, M.D., President

Crisp County Medical Society.

Cordele, Ga., May 24, 1930.

## ARTICLES ACCEPTED

*To the Editor:*

In addition to the articles enumerated in our letter of April 25th the following have been accepted:

Eli Lilly & Co.—Ampoules Glucose (Dextrose, U. S. P. O. Lilly, 50 Gm., 100 cc.

Parke, Davis & Co.—Parke, Davis & Co.'s Cod Liver Oil with Viosterol 5 D.

Sandoz Chemical Works, Inc.—Scillaren: Tablets Scillaren; Solution Scillaren. Scillaren-B: Ampules Scillaren-B.

W. A. PUCKNER, Secretary,

Council on Pharmacy and Chemistry,

American Medical Association.

Chicago, Ill., May 29, 1930.

## UNIVERSITY EXTENSION

*To the Editor:*

The following letter was sent to all members near the cities where postgraduate courses were given:

"I wrote you last year concerning our wish to broaden the scope of our postgraduate medical extension instruction program, and you were kind enough at that time to express interest in that work. We were obliged to postpone the development of our plans last year because we lacked the funds to give this work free of charge to all practicing physicians in the state. I am happy to say that arrangements have been completed for carrying out our program and all practicing physicians are cordially invited to participate and to receive the full benefit of the postgraduate medical extension lectures and clinics without charge.

"With the approval of the Medical Association of Georgia and with the co-operation of the county medical societies, the State Board of Health and the medical schools of Emory University and the University of Georgia are co-operating through the Division of University Extension in providing a full week of postgraduate medical extension lectures and clinics on various subjects in six communities in widely separated sections of the State—Cordele, LaGrange, Cornelia, Bainbridge, Waycross, and Rome. The in-

structional staff visited Cordele last week and are working this week in Bainbridge. Next week, June 2-6, inclusive, they will be in Waycross; the following week, June 9-13, inclusive, in LaGrange; the next week, June 16-20, inclusive in Cornelia, and the final week, June 23-27, inclusive, in Rome.

"Physicians in all counties reasonably accessible to any of these six communities have been invited by the local county medical societies to join them in the week's work in their respective communities. Doubtless you have an invitation to visit one or another of the six towns during the week for which the work is scheduled; possibly you may already have participated in the work either at Cordele last week or at Bainbridge this week. I enclose a copy of the program which is being carried out in all six places, one full week in each place, as indicated above, together with a copy of a letter from Dr. Guy G. Lunsford, President of the Crisp County Medical Society, concerning the work at Cordele last week. You are cordially invited to attend the lectures and clinics at any one of the remaining four places (Waycross, LaGrange, Cornelia, Rome) any or all days during the weeks our medical staff will be in those towns. The daily program begins at 2:00 o'clock p.m. in each place, except LaGrange at 4:00 p.m."

J. C. WARDLAW,

Director of University Extension,  
University of Georgia.

Athens, Ga., May 29, 1930.

## TRUTH ABOUT MEDICINES

## NEW AND NONOFFICIAL REMEDIES

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

Synephrin. — Hydroxyphenylmethyldaminoethanol Hydrochloride—The hydrochloride of an alkaloid obtained synthetically. Synephrin is used as a vasoconstrictor. It is less toxic than either epinephrine or ephedrine, and its vasoconstrictor action, while not so pronounced as that of epinephrine, endures for a longer time. In combination with procaine hydrochloride it is useful for local anesthesia in dental operations and in minor surgery in cases in which a bloodless area is not required. The drug is also supplied in the form of Synephrin Solution "A", Ampoules Synephrin-Procaine, 3 cc. and Hypodermic Tablets Synephrin-Procaine. Frederick Stearns & Co., Detroit.

Mead's Dextri-Maltose with Vitamin B.—A mixture containing approximately: maltose, 52.58 per cent; dextrans, 39.80 per cent; protein, 4.34 per cent; mineral salts, 2.28 per cent, and moisture, 1.00 per cent. It is standardized physiologically to contain in each 2.5 Gm. the vitamin B<sub>1</sub> and B<sub>2</sub> equivalent of approximately 1 Gm. of dried yeast or 2 Gm. of wheat embryo. Mead's Dextri-Maltose with vitamin B is proposed for use in the diet of infants suffering from vitamin B deficiency. Mead Johnson & Co.,



Evansville, Ind. (*Jour. A. M. A.*, May 3, 1930, p. 1405.)

Scillaren.—A mixture of the natural glucosides, scillaren-A and scillaren-B, occurring in fresh squill *Urginea maritima*, in the proportions in which they exist in the fresh crude drug—namely, about two parts of scillaren-A to one part of scillaren-B. Completely dried scillaren contains approximately 98 per cent of the active glucosides. Scillaren dried in a high vacuum at 78 C. for fifteen hours loses not more than 6 per cent of its weight. The cardiac action of scillaren is essentially similar to that of digitalis; but this action is apparently less persistent than that of digitalis. Scillaren is administered orally and is supplied in the form of tablets containing 0.8 mg. (1/80 grain) of scillaren and in the form of a solution containing 0.8 mg. (1/80 grain) of scillaren. Sandoz Chemical Works, Inc., New York.

Scillaren-B.—The amorphous component of the natural mixture of the glucosides occurring in squill, *Urginea maritima*. Completely dried scillaren-B contains approximately 99.5 per cent active glucosidal substance. Scillaren-B dried in a high vacuum at 78 C. for fifteen hours loses not more than 5 per cent of its weight. The actions and uses are the same as those of scillaren. It is administered intravenously when immediate action is imperatively indicated. Scillaren-B is marketed in the form of ampules, each containing 0.5 mg. (1/130 grain) of scillaren-B. Sandoz Chemical Works, Inc., New York.

#### ACCEPTED DEVICES FOR PHYSICAL THERAPY

The following have been accepted by the Council on Physical Therapy of the American Medical Association for inclusion in its list of accepted devices for physical therapy:

Comprex Electro-Cautery and Diagnostic Light (Comprex Oscillator Corporation, New York). A device for cauterization by means of electrodes which are electrically heated to the desired temperature. The device consists essentially of a transformer, designed to operate on either a 110 or 220-volt, 60-cycle, alternating current circuit. The transformer is also tapped at such point as will give the desired voltage for the operation of a diagnostic light.

"Stoppollen" Air Filter (Davies Air Filter Company, New York). A simplified portable filter which delivers dust and pollen-free air. The apparatus is described as consisting of a cabinet rectangular in shape, which contains the filter screen, a pressure fan and an electric motor, and is so constructed as to fit into any sized window. The cost of operating the device continuously for twenty-four hours is about 10 cents. Tests were conducted which demonstrated that the Stoppollen air filter was efficient as a means of keeping a room free from dust and pollens. (*Jour. A. M. A.*, May 31, 1930, p. 1760.)

The Seal of the Council on Pharmacy and Chemistry and of the Committee on Foods.—The seal may be used in advertising in circulars and on packages after acceptance of the product is announced. The

seal, if it appears on the package, must be the only seal of such character and must not appear in conjunction with the seals of any other investigative organization. The seal is to be used without any comment by the advertisers, unless such comment has been submitted to the Council or the Committee and approved by them. Should the product, for any reason, become unacceptable, all use of the seal must be discontinued within six months. Only the seal authorized by the body accepting the product shall be used in advertising the product. Products exempted by either the Council or the Committee shall be permitted to be advertised in publications of the American Medical Association, but the use of the seal shall not be granted in connection with such advertising. (*Jour. A. M. A.*, May 3, 1930, p. 1407.)

Coffey-Humber Method for Cancer.—The remarkable publicity accompanying the introduction of the Coffey-Humber method for the treatment of cancer passed briefly into a quiet phase, leaped upward with the eastward jaunt to the congressional hearing, again became quiescent for a few weeks, and burst forth into a Sunday supplement feature. In the meantime pathologists, surgeons, and other connoisseurs who have investigated the method express nothing but profound disappointment with both the clinical and the pathologic results. (*Jour. A. M. A.*, May 3, 1930, p. 1410.)

John R. Brinkley, Quack.—Newspaper reports on John R. Brinkley, who has been described as the "goat-gland grafter" and who has made a Kansas crossroads settlement into a second-class postal station, continue to bring stories of the experiences of a few of Brinkley's victims. Also the publicity has brought out other facts that, while doubtless not news to those who are fully acquainted with Brinkley, have been unknown to the general public and the medical profession. (*Jour. A. M. A.*, May 3, 1930, p. 1426.)

Plasmochin. — "Plasmochin Compound" is stated by the manufacturer to be "sugar-coated pills containing 0.01 Gm. of Plasmochin and 0.125 Gm. of quinine sulphate." The only way in which Plasmochin may be characterized as "extremely dangerous" is that its safe (but efficient) dose is much smaller than that of quinine. Its most important untoward effect is cyanosis due to methemoglobin formation. Abdominal pains have also been produced by it. It is liable to cause the symptoms of conchionism, such as tinnitus and dizziness; and it has been charged with favoring the occurrence of blackwater fever. The Council on Pharmacy and Chemistry published a preliminary report on Plasmochin in 1927, when the product was not being marketed in this country. Now the Winthrop Chemical Company markets "Plasmochin Compound", but has not taken steps to make this preparation accepted for New and Nonofficial Remedies. (*Jour. A. M. A.*, May 3, 1930, p. 1429.)

The Pharmacopeial Convention.—At the recently held Pharmacopeial Convention in Washington, the delegates with commercial interests far outnumbered those from the medical profession. For the interests that opposed medical control of therapeutics, leadership was assumed by Henry H. Rusby, the "sacred cow" of certain druggists. Rusby was testifier for the Wine of Cardui Company in its suit against the American Medical Association, a testifier for a firm against which the Post Office Department has issued a fraud order, a testimonial producer for the Fleischmann Company, and he has been the chief supporter of Ambruster, importer of Spanish ergot, in his attacks on the Food and Drugs Department. At the previous convention an agreement was reached that the scope of the Pharmacopeia, at least so far as concerned therapeutic usefulness, be determined by the medical members of the Revision Committee and that questions of pharmaceutical necessity be determined by the pharmaceutical members. At the present convention, Torald Sollmann offered a motion to instruct the Committee on Revision to charge the medical members with the responsibility of final decisions in the selection of products of therapeutic usefulness. This motion was not adopted, instead it was decided that a two-thirds vote of the Revision Committee would finally settle the question of inclusion of any article. Since the pharmaceutical interests far outnumber the medical representation, this means that pharmacists will determine the admission of drugs to the Pharmacopeia. It is clear that the United States Pharmacopeia is confronted with an epoch of degeneration against which the medical and scientific members of the Revision Committee are likely to fight a losing battle. The present organization of the United States Pharmacopeial Convention is undemocratic and unscientific. Unless some scientific plan for the revision of the Pharmacopeia is adopted, it may be necessary to advocate government control of the entire matter. (*Jour. A. M. A.*, May 24, 1930, p. 1707.)

Selection of Drugs in Hospitals.—The hospital should afford unusual opportunities for enhancing rational drug therapy. There particularly may products be submitted to critical inspection. As Sollmann so pointedly remarked at the recent Congress on Medical Education, the "evaluation of therapeutic remedies is not usually among the features to which hospital authorities point with just pride of achievement." The hospital drug room, which reflects directly the medicinal requests of the staff, has hardly

kept pace with the modernization of other departments of the hospital. As for proprietary medicines, the shelves often remind us of what Irons aptly terms the "chain drug-soda-fountain-lunchroom." While in most medical schools the student receives good courses in pharmacology, materia medica and therapeutics and is made familiar with New and Nonofficial Remedies, it is unfortunately true that when the student becomes an intern in a hospital he finds not infrequently that irrational prescriptions are written by the "chief" of a service, who has not kept pace with the trend of modern drug therapy. All too often he prescribes proprietary drugs when the same drug is obtainable under the pharmacopeial name at a much lower cost. To mitigate the evils of the prescribing of proprietaries, Irons has suggested the issuance of a hospital manual which shall contain hospital rules and a formulary. The Council on Medical Education with the cooperation of the Council on Pharmacy and Chemistry is following up the suggestion and considering the preparation of such a manual. (*Jour. A. M. A.*, May 31, 1930, p. 1764.)

Use of Thyroid in Obesity.—The use of thyroid in obesity should always be controlled by a previous basal metabolism test. If this is normal or subnormal, it is safe for a physician to use thyroid. The best practice is to start with small doses of desiccated thyroid (Thyroideum, U. S. P.) gradually increasing. The small dose would be approximately 0.03 Gm. ( $\frac{1}{2}$  grain) twice a day. The physician must keep a sharp lookout for fast pulse, nervousness, or other symptoms resulting from thyroid stimulation. An obese person should not expect reduction by thyroid unless his diet is restricted, and when dietary restrictions are followed thyroid is not needed as frequently. (*Jour. A. M. A.*, May 31, 1930, p. 1784.)

#### THE JOHN PHILLIPS MEMORIAL PRIZE

The American College of Physicians announces the John Phillips Memorial prize of \$1,500, to be awarded for the most meritorious contribution in Internal Medicine and sciences contributing thereto, under the following conditions:

- (1) The contribution must be submitted in the form of a thesis or dissertation based upon published or unpublished original work.
- (2) It must be mailed to the Executive Secretary of the American College of Physicians on or before August 31, 1930.
- (3) The thesis or dissertation must be in the English language, in triplicate, in typewritten or printed form, and the work upon which it is based must have been done in whole or in part in the United States or Canada.
- (4) The recipient of the prize would be expected to read the essay at the next annual



meeting of the college, after which he would be officially presented with the prize by the President.

- (5) The College reserves the right to make no award of the prize if a sufficiently meritorious piece of work has not been received.
- (6) The announcement of the prize-winner will be made not later than two months before the annual meeting.

#### AMERICAN COLLEGE OF PHYSICIANS.

E. R. Loveland, Executive Secretary,  
133-135 South 36th Street,  
Philadelphia, Pa.

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#### BOOKS RECEIVED

*Procedure in the Examination of the Lungs*—With Special Reference to the Diagnosis of Tuberculosis. By Arthur F. Kraetzer, M. D., Chief, Medical Department, New York Skin and Cancer Hospital; Instructor in Medicine, Cornell University; formerly, Tuberculosis Out-Patient Department, Bellevue Hospital, and Assistant Adjunct Attending, Tuberculosis Service, Bellevue Hospital. With a foreword by James Alexander Miller, M. D., Publishers. Oxford University Press, New York.

*Minor Surgery*. By Arthur E. Hertzler, M. D., Chief Surgeon of Halstead Hospital, and Victor E. Chesky, M. D., Chief Resident Surgeon of Halstead Hospital. Second Edition. Contains 602 pages, with 475 illustrations. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Mo. Price \$10.

*Infant Nutrition*. A Textbook of Infant Feeding for Students and Practitioners of Medicine. By Williams McKim Marriott, B. S., M. D., Professor of Pediatrics, Washington University School of Medicine; Physician in Chief of St. Louis Children's Hospital, St. Louis. Contains 375 pages, illustrated. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Mo. Price \$5.50.

*The Collected Papers of the Mayo Clinic and the Mayo Foundation for 1929*, Vol. XXI. Edited by Mrs. M. H. Mellish, Richard M. Hewitt, M. D., and Mildred A. Felker, B. S. Octavo volume of 1197 pages with 279 illustrations. W. B. Saunders Company, 1930. Philadelphia, Pa. Price, cloth, \$13.

*Surgical Diagnosis, Volume III and Separate Index Volume*, completing the new work by forty-two American authors. Edited by Evarts Ambrose Graham, M. D., Professor of Surgery, Washington University Medical School. Three octavo volumes, totaling 2,750 pages, containing 1,250 illustrations, and Separate Index Volume. W. B. Saunders Company, 1930. Philadelphia, Pa. Price, cloth, \$35 a set.

*Human Helminthology, a Manual for Clinicians, Sanitariums and Medical Zoologists*, by Ernest Carroll Faust, Ph. D., Professor of Parasitology in the College

of Medicine of Tulane University of New Orleans, Louisiana. Contains 616 pages with 297 illustrations. Publishers: Lea & Febiger, Philadelphia. Price \$8.00.

*Roentgenographic Technique, a Manual for Physicians, Students and Technicians*, by Darmon Artelle Rhinehart, A. M., M. D., Professor of Roentgenology and Applied Anatomy, School of Medicine, University of Arkansas; Roentgenologist of St. Vincent's Infirmary, Baptist State Hospital, Missouri Pacific Hospital, and the Arkansas Children's Hospital. Contains 388 pages with 159 illustrations. Publishers: Lea & Febiger, Philadelphia. Price \$5.50.

*Endocrine Diseases, including their Diagnosis and Treatment*, by Wilhelm Falta, Vienna. Translated and edited by Milton K. Meyers, M. D., Neurologist to the Northern Liberties Hospital; to the Lucien Moss Home, Jewish Hospital; to the Dispensary of the St. Agnes Hospital, Philadelphia. With a foreword by Sir Archibald E. Garrod, K. C. M. G., M. D., Regius Professor of Medicine, Oxford University. Third Edition with supplementary notes by the editor. The previous editions bore the title of the Ductless Glandular Diseases. Contains 669 pages with 104 illustrations. Publishers: P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia.

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#### NEWS ITEMS

Dr. Henry R. Slack, LaGrange, represented for the fourth consecutive time the Medical Association of Georgia as a delegate in the Pharmacopeial Convention held in Washington, D. C., on May 13, 1930. This was the Eleventh Decennial Convention. One hundred and ten years ago the convention met in Washington. Dr. Slack, while a student in the Atlanta Medical College in 1890, represented the school as a delegate in the convention.

The Five County Medical Societies of Greater New York has just completed its report which describes the recent campaign in the interest of the health examination conducted by the Greater New York Committee. Because of the success of the recently completed health examination campaign, aimed at improving the health of the city by bringing to the attention of the public the importance of regular health examinations as a means of preventing disease, a new program involving a year's activities will go into effect at once. This was announced today by Dr. Iago Galdston, Secretary of the Greater New York Committee on Health Examination and Executive Secretary of the Medical Information Bureau of the New York Academy of Medicine. The program, which is fostered by the Five County Medical Societies, representing 12,000 physicians of Greater New York, was approved, together with a budget of over \$30,000 for the year's expenditures, at a meeting of the committee held in the Academy of Medicine, 2 East 103rd Street.



The American College of Physical Therapy will hold its ninth annual scientific session September 8th to 12th, inclusive, at the New Hotel Jefferson, St. Louis, Mo. An intensive postgraduate week of physical therapy is promised.

The American Heart Association will hold its annual scientific session in the auditorium of the Detroit College of Medicine, Detroit, Mich., on Tuesday, June 24th.

Dr. Stephen B. Malone, Sandersville, attended the Assemblies of the Interstate Postgraduate Medical Association of North America, which was held in Europe. He and Mrs. Malone sailed from New York on May 14th on the S. S. President Harding. This is the sixth session of the Assemblies in Europe.

The members of the Fulton County Medical Society entertained Dr. W. S. Rankin, of the Duke Foundation, Charlotte, N. C., and Dr. A. J. Cramp, Director of the Bureau of Investigation of the American Medical Association, Chicago, on May 9th.

Dr. Dan Y. Sage, Atlanta, delivered diplomas to twenty-six graduates of the Grady Hospital Nurses Training School on May 7th. Dr. E. C. Thrash, Chairman of the Executive Committee, was the speaker of the occasion. Graduating exercises were held in Taft Hall of the Auditorium.

Dr. H. M. Tolleson, formerly of Smithville, has removed to Hahira.

The Chattahoochee Valley Medical and Surgical Association will hold its annual session in Albany on July 8-9.

Drs. Edwin J. and W. D. Dorminy, Fitzgerald, entertained the members of the Ben Hill County Medical Society to a fish fry at Bowen's Mill on May 6th. The druggists and nurses of Fitzgerald were also guests at dinner.

The Georgia Urological Association was formally organized in Augusta during the annual session of the Medical Association of Georgia, May 14, 15, 16. Officers elected were: Dr. W. L. Champion, Atlanta, President; Dr. W. F. Reavis, Waycross, Vice-President; Dr. Allen F. Caldwell, Atlanta, Secretary-Treasurer. Members of the Executive Committee: Dr. E. G. Ballenger, Atlanta; Dr. Ernest Corn, Macon; Dr. W. A. Upchurch, Atlanta. The next regular meeting of the Association will be held in Atlanta in October.

The Atlanta Urological Society had as its guest Dr. Edward L. Keyes, of New York City, on May 29th. He was entertained at dinner in the Capitol City Club. Later in the evening he delivered an address at the Academy of Medicine on "The Prospects of the Prostatic."

The Southeastern Surgical Congress completed the organization of the Georgia State Section in Augusta during the annual session of the Association on May

14-16. The membership is divided into: (a) Honorary Fellows; (b) Senior Fellows; (c) Junior Fellows. The honorary fellows chosen in Georgia are: Dr. E. C. Davis, Atlanta; Dr. John G. Earnest, Atlanta; Dr. Harris M. Branham, Brunswick; Dr. W. S. Elkin, Atlanta, and Dr. J. L. Campbell, Atlanta. The senior fellow membership is limited to fifty from each state, and must be surgeons of high standing in their respective states. The junior members have not been chosen; however, application blanks will be mailed out to the junior list as rapidly as their names are proposed to the Executive Council. Any reputable surgeon may apply for membership. Organization of the different state sections is going forward and it is hoped to have them completed in time for a convention of all the seven states in the Southeast some time during the year 1931. Because of the scope of work the Congress proposes to cover, provisions are made in the constitution and by-laws for an honorary or advisory board, consisting of prominent professional and business men. These men will act in an advisory capacity to the Executive Council. The men chosen are: Governor L. G. Hardman, Dr. Harvey Cox, Dr. M. L. Brittain, Dr. Louis Newton, Rabbi David Marx, Dr. T. F. Abercrombie, and Hon. Eugene Black. The officers and Executive Councilors are: Dr. E. G. Ballenger, Atlanta, President; Dr. L. C. Fischer, Atlanta, Vice-President; Dr. C. W. Roberts, Atlanta, President-Elect; Dr. B. T. Beasley, Atlanta, Secretary-Treasurer. Councilors: Dr. Marion C. Pruitt, Atlanta, for five years; Dr. Dan Y. Sage, Atlanta, for four years; Dr. A. J. Mooney, Statesboro, for three years; Dr. Richard Binion, Milledgeville, for two years; Dr. Stewart D. Brown, Royston, for one year.

The Randolph County Medical Society held its regular monthly meeting in the Woman's Club Room, Cuthbert, on June 5th. Dr. C. K. Sharp, Arlington, and Dr. J. B. Parham, Fort Gaines, gave Case Reports; Dr. S. P. Holland, Blakely, read a paper entitled "Should a Doctor of Medicine Also Be a Business Man?"

Dr. W. A. Gardner announces the removal of his office to 1107 Medical Arts Building, Atlanta.

Dr. S. T. R. Revell, Louisville, in acknowledging official notice of his election as Second Vice-President of the Association, writes as follows: "The contents of your letter of May 31st leaves me somewhat adrift, for while I would be only too glad to render service to the Medical Association of Georgia, yet I know of no means by which I may consummate this end. Should your ingenuity suggest means, communicate your desire to me and I will execute them to the best of my ability."

Dr. James A. Wood announces the removal of his office to 605 Medical Arts Building, Atlanta.

The Eye, Ear, Nose and Throat Club of Georgia elected the following officers for the ensuing year:

Dr. William L. McDougall, Atlanta, President; Dr. William O. Martin, Atlanta, Secretary-Treasurer.

The Secretary-Treasurer will be glad to communicate with any reputable physician in reference to an excellent location for a doctor. Which is claimed to be in one of the best farming sections of the State.

The Dallas (Texas) Southern Clinical Society held its first conference April 14-18 at the Baker Hotel, Dallas. A total registration of 1,012 was reached. The general outline of the programs consisted of morning operative and diagnostic clinics in the Baylor, St. Paul's, Methodist, Parkland, and Bardford Memorial hospitals; round table luncheons at noon, in medical and surgical groups; general sessions in the afternoons with guests as speakers, and special events in the evenings.

Vitamin eggs for your patients are advertised in this issue of the JOURNAL. They have the approval of the Co-operative Medical Advertising Bureau of Chicago; also Dr. Morris Fishbein, editor of the *Journal of the American Medical Association*. If you prescribe eggs, do not overlook the ad of Marshall & Bell, distributors, Medical Arts Building, Atlanta, for the Pine Grove Poultry Ranch.

Dr. Gerald Mitchell announces the removal of his office to 912 Candler Building, Atlanta.

Dr. C. L. Ayers, Toccoa, was presented with a fountain pen for his faithful service as Secretary-Treasurer of Stephens County Medical Society. He has held the office for the greatest number of consecutive years of any known Secretary-Treasurer of a county society within the State. The pen was presented to Dr. Ayers with many compliments at the annual banquet of the Association on May 15th at the Partridge Inn, Augusta.

The Health Officers Association met on May 14th at the Partridge Inn, Augusta. Dr. Eugene E. Murphy, Augusta, President, presided. Minutes of its former meeting were read and approved. There was no official or pre-arranged program, but a general round-table discussion of various health activities throughout the State by the members. The meeting adjourned at 1:00 for a luncheon at the Partridge Inn.

Dr. A. S. M. Coleman, Douglas, was elected President of the Railway Surgeons Association of the Georgia and Florida Railroad at a recent meeting held in Augusta.

The program of the American Medical Association for its Detroit meeting to be held June 23rd to 27th includes the names of a number of Georgia physicians, as follows: Dr. F. G. Hodgson, Atlanta, will illustrate the latest methods of Treating Fractures; Dr. William Perrin Nicolson, Jr., Atlanta, will display photographs of Tumors of the Jaw; Dr. Jack W. Jones and Herbert S. Alden, Atlanta, will read a paper entitled Madura Foot; Dr. Stewart R. Roberts and

R. R. Cracke, Atlanta, Diseases of the Throat; Dr. Charles E. Dowman and Dr. Wm. A. Smith, Atlanta, Removal of Spinal Cord Tumors. Drs. E. C. Thrash, Atlanta; William H. Myers, Savannah, and O. H. Weaver, Macon, will represent the Association in the House of Delegates. Dr. Allen H. Bunce, Atlanta, is a member of the Board of Trustees, term expiring in 1934. Dr. James E. Paullin, Atlanta, is a member of the Executive Committee on the Practice of Medicine.

The Chicago Medical Society will hold its summer clinics at the Cook County Hospital, Chicago, August 11th to 22nd, inclusive.

The Chicago Medical Society Bulletin began publishing on May 24th reports of the Pathological Conferences conducted by Dr. R. H. Jaffee at the Cook County Hospital. Those interested may obtain full information from the office of the Chicago Medical Society, 185 North Wabash Avenue, Chicago.

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#### OBITUARY

*Dr. Leroy Napier*, Lumber City; member; Emory University School of Medicine, 1898; aged 62; died at his home on May 4, 1930. He took postgraduate courses at Tulane University of Louisiana School of Medicine, New Orleans, and at Bellevue Hospital and Medical College, New York City. Dr. Napier was at one time superintendent of the Macon Hospital and after moving to Lumber City was surgeon for the Southern Railroad for a number of years. He practiced medicine in his home community for twenty-eight years. Surviving him are his widow, two daughters, Mrs. W. H. Bohannon, Atlanta; Miss Jean P. Napier, of Philadelphia; two sons, Leroy, Jr., Lumber City, and Augustus Y. Napier, student at the University of Georgia.

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*Dr. William Alexander Carlton*, Athens; Jefferson Medical College of Philadelphia, Pa., 1873; aged 84; died at his home on May 9, 1930. He practiced in Athens and surrounding community for almost a half century. Dr. Carlton possessed all the virtues that go to make a good citizen. He was one of Athens' greatest benefactors, sincere, charitable, and sympathetic to the extreme for those less fortunate in life. Dr. Carlton was held in high esteem as a physician and citizen by all the people who knew him. Surviving him are his widow, one son, W. A. Carlton, Jr., Jacksonville, Fla.; one daughter, Miss Annie Carlton, Athens. Funeral services were conducted from the residence by Dr. Lester Rumble, pastor of the First Methodist Church, and interment was in Oconee Cemetery.

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*Dr. William Ira Butler*, Unadilla; University of Georgia Medical Department, Augusta, 1905; aged 52; died in a private hospital in Macon on May 12,

1930. He was born and reared in Wilkinson County. Dr. Butler was prominent in civic and religious affairs, a member of the Exchange Club, Board of Education, and the First Methodist Church, and Chairman of the Board of Stewards of the church. Surviving him are two sons, Howard and James; one daughter, Miss Caroline Butler. Funeral services were conducted from the Methodist Church and interment in Walnut Hill Cemetery.

*Dr. Reuben Benjamin Durrett*, Atlanta; Atlanta School of Medicine, Atlanta; age 66; died at the home of his daughter, Mrs. W. P. Briggs, 3 Peachtree Avenue, Buckhead, on May 24, 1930. He was born and reared in Carroll County and came to Atlanta when a young man. Dr. Durrett served as City Health Officer during the term of Robert F. Maddox as Mayor, 1904-1905. He was a member of the Buckhead Baptist Church. Surviving him are one

son, Capt. M. B. Durrett, Fort Sheridan, Ill.; four daughters, Mrs. W. P. Briggs, Mrs. W. C. Mayville, Mrs. M. K. Word, and Mrs. Roy Jordan, all of Atlanta. Funeral services were conducted from the Buckhead Baptist Church by Rev. J. H. Fuller and interment in Greenwood Cemetery.

*Dr. Elbert P. Rose*, Valdosta; College of Physicians and Surgeons, Baltimore, Md., 1888; aged 68; died at his home on June 1, 1930. He was a native of Johnson County, N. C. After practicing medicine for a number of years, Dr. Rose became actively engaged in naval stores operations and acquired large property holdings in Georgia and Florida. He was a man of a congenial disposition and made many friends. Surviving him are his widow, two daughters, Miss Blanche Rose, Valdosta, and Mrs. H. S. Price, Moultrie; three sons, Frank, Robert, and E. P. Rose, Jr., all of Valdosta.

## MEMBERS REGISTERING AT THE EIGHTY-FIRST ANNUAL SESSION

AUGUSTA, MAY 14, 15, 16, 1930

### A

Abercrombie, T. F., Atlanta  
Adams, Edward N., Augusta  
Adams, E. T., Augusta  
Akerman, Joseph, Augusta  
Alden, Herbert S., Atlanta  
Aldrich, F. N., Brunswick  
Allen, H. D., Jr.,  
Milledgeville  
Anderson, Carl L., Macon  
Anderson, J. H., Augusta  
Anderson, W. Willis, Atlanta  
Ansley, H. G., Decatur  
Applewhite, J. D., Macon  
Askew, H. H., Atlanta  
Askew, P. H., Nashville  
Aven, C. C., Atlanta  
Aycock, Mell, Atlanta  
Ayer, G. D., Atlanta  
Ayers, A. J., Atlanta  
Ayers, C. L., Toccoa

### B

Bachman, Geo., Emory  
University  
Bacon, A. S., Albany  
Bailey, C. Y., Augusta  
Bailey, D. V., Elberton  
Baird, W. A., Augusta  
Bancker, E. A., Jr., Atlanta  
Barfield, F. M., Atlanta  
Baker, Elliott L., Jr.,  
Augusta  
Ballenger, E. G., Atlanta  
Ballenger, W. L., Atlanta  
Barber, W. E., Atlanta

Barrow, Craig, Savannah  
Bashinski, Benj., Macon  
Bassett, Victor H., Savannah  
Bateman, N. B., Jr., Augusta  
Battay, Colden, Augusta  
Battay, W. W., Augusta  
Bazemore, Wallace L.,  
Macon  
Beasley, B. T., Atlanta  
Bedingfield, W. O., Augusta  
Bedingfield, W. R., Augusta  
Bennett, J. C., Jefferson  
Bennett, W. L., Moultrie  
Benson, Marion T., Atlanta  
Benson, N. O., Augusta  
Bent, H. F., Midville  
Bernard, G. T., Augusta  
Binion, R., Milledgeville  
Bird, J. D., Jr., Augusta  
Bivings, Lee, Atlanta  
Blackford, L. Minor, Atlanta  
Blanchard, H. H., Augusta  
Boland, Frank K., Atlanta  
Boland, S. A., Thomson  
Bowcock, Harold, Atlanta  
Bowdoin, Joe P., Adairsville  
Bowen, A. J., Portal  
Brannen, C. C., Moultrie  
Brawner, Jas. N., Atlanta  
Bradford, R. W.,  
Milledgeville  
Bradley, D. M., Waycross  
Brim, J. C., Augusta  
Brittingham, John W.,  
Augusta

Brown, A. G., Augusta  
Brown, R. K., Augusta  
Brown, Stewart D., Royston  
Brown, Thos. P., Augusta  
Brown, Walter, Augusta  
Bryan, W. M., Savannah  
Bryans, C. I., Augusta  
Bryson, R. I., Augusta  
Bunce, Allen H., Atlanta  
Burdashaw, Jas. F., Augusta  
Burdashaw, W. J., Augusta  
Burford, Robt. S., Brunswick  
Burke, B. Russell, Atlanta  
Burns, J. K., Gainesville  
Burpee, C. M., Augusta  
Bush, Jas. L., Augusta  
Butler, J. H., Augusta  
Byrd, T. L., Atlanta  
Byne, J. M., Jr., Waynesboro  
Byne, J. M., Waynesboro

### C

Cail, J. C., Sylvania  
Caldwell, Allen F., Atlanta  
Calhoun, Abner W., Atlanta  
Campbell, J. L., Atlanta  
Carter, D. M., Madison  
Cason, W. M., Sandersville  
Champion, W. L., Atlanta  
Chandler, B. B., Athens  
Chandler, J. H., Swainsboro  
Chaney, Ralph H., Augusta  
Chaudron, P. O., Cedartown  
Cheek, O. H., Dublin  
Cheek, Pratt, Gainesville  
Chesnutt, T. H., Moultrie



Churchill, C. W., Augusta  
 Clark, Badie T., Augusta  
 Clark, F. B., Augusta  
 Clark, Jas. J., Atlanta  
 Clark, M. A., Macon  
 Clark, T. H., Douglas  
 Clark, W. H., LaGrange  
 Claxton, E. B., Dublin  
 Clayton, M. D., Augusta  
 Cleckley, Harvey, Augusta  
 Clifton, Ben H., Atlanta  
 Coker, Grady N., Canton  
 Coleman, A. S. M., Douglas  
 Coleman, Warren A.,  
     Eastman  
 Coleman, Y. R., Macon  
 Cook, J. M., Sardis  
 Corn, Ernest, Macon  
 Cornwell, Gibson K.,  
     Augusta  
 Crane, Chas. W., Augusta  
 Cranston, W. J., Augusta  
 Crawford, W. B., Savannah  
 Crawley, W. G., Jr., Rome  
 Crichton, Robt. B., Atlanta  
 Cross, John B., Atlanta  
 Crow, H. E., Talmo  
 Crozier, G. T., Valdosta  
 Curtis, W. L., Sparks

## D

Dancy, Wm. R., Savannah  
 Daniel, J. W., Jr., Savannah  
 Davidson, A. A., Augusta  
 Darden, Horace, Sparta  
 Davis, A. W., Warrenton  
 Davis, Hartley, Macon  
 Davison, Hal M., Atlanta  
 Dean, J. G., Dawson  
 Dees, J. E., Augusta  
 Dees, J. H., Alston  
 Demmond, E. C., Savannah  
 Dickson, Roger W., Atlanta  
 Dorsey, H. A., Pitts  
 Doster, H. W., Rocky Ford  
 Dougherty, Mark S., Atlanta  
 Douglas, W. C., Augusta  
 Dowman, Chas. E., Atlanta  
 Downing, E. E., Newington  
 Drane, Robert, Savannah  
 Drummond, C. S., Franklin  
 Dunn, Lawrence B.,  
     Savannah  
 DuVall, Beecher, Atlanta  
 Dykes, J. R., Swainsboro

## E

Echols, Geo. L., Milledgeville  
 Edgerton, M. T., Atlanta  
 Edmundson, J. W., Jr.,  
     Dublin  
 Egan, M. J., Jr., Savannah

Elarbee, Geo. W., Daisy  
 Elmore, B. V., Rome  
 Emery, W. B., Atlanta  
 Elrod, J. O., Forsyth  
 Epting, M. J., Savannah  
 Equen, Murdock, Atlanta  
 Estes, W. H., Lincolnton  
 Eve, Hinton J., Augusta  
 Ezell, H. E., Oliver

## F

Faggart, Geo. H., Savannah  
 Farmer, L. P., Fargo  
 Feen, B. G., Augusta  
 Fike, R. H., Atlanta  
 Fitts, John B., Atlanta  
 Floyd, Chas. S., Loganville  
 Floyd, Earl, Atlanta  
 Floyd, J. T., Atlanta  
 Fort, A. G., Atlanta  
 Fountain, Jas. A., Macon  
 Franklin, R. C., Swainsboro  
 Freeman, Ralph, Hoschton  
 Fulghum, C. B., Savannah  
 Fuller, Geo. W., Atlanta  
 Fullilove, H. M., Athens

## G

Gaines, Lewis M., Atlanta  
 Garner, J. R., Atlanta  
 Garrard, J. L., Rome  
 Garrison, D. H., Tate  
 Garrison, W. H., Clarkesville  
 Gary, Loren, Jr., Georgetown  
 Gary, Loren, Georgetown  
 Gay, Thos. Bolling, Atlanta  
 Gepfert, J. R., Jr., Macon  
 Gerdine, Linton, Athens  
 Gleaton, E. N., Savannah  
 Glidden, Edson W., Alto  
 Goldsmith, W. S., Atlanta  
 Goodglick, Samson, Augusta  
 Goodrich, Wm. H., Augusta  
 Goodwin, Thos. W.,  
     Augusta

Goodwyn, Thos. P., Atlanta  
 Gray, J. D., Augusta  
 Green, A. J., Union City  
 Greene, Ed H., Atlanta  
 Greer, Chas. A., Oglethorpe  
 Greer, C. B., Brunswick  
 Griffith, E. F., Eatonton  
 Griffith, Powell W., Augusta  
 Griffiths, T. H. D., Albany  
 Grove, Lon W., Atlanta  
 Grubbs, J. H., Molena

## H

Haddock, S. H., Millen  
 Hailey, Howard, Atlanta  
 Hall, W. L., Nicholls  
 Hammond, R. L., Jackson  
 Harbin, Robt. M., Jr., Rome

Harper, G. T., Dewy Rose  
 Harrell, H. P., Augusta  
 Harris, H. B., Jr., Augusta  
 Harris, R. L., Augusta  
 Harrison, M. T., Atlanta  
 Harrold, C. C., Macon  
 Harvard, V. O., Arabi  
 Head, M. M., Zebulon  
 Heagarty, John P., Augusta  
 Helton, B. L., Sandersville  
 Hicks, C. C., Augusta  
 Hillis, W. W., Sardis  
 Hinton, Chas. C., Macon  
 Hinton, O. H., Augusta  
 Hodges, Chas. A., Dublin  
 Hodges, J. H., Hapeville  
 Hodgson, F. G., Atlanta  
 Holliday, Paul L., Athens  
 Holliday, J. C., Athens  
 Holmes, L. P., Augusta  
 Holmes, W. B., Wadley  
 Holton, C. F., Savannah  
 Horne, Geo. T., Augusta  
 Houston, W. R., Augusta  
 Howard, H. L., Springfield  
 Howard, James W., Augusta  
 Howard, Lee, Savannah  
 Howard, Thos. L., Augusta  
 Hubert, M. A., Athens  
 Hull, Aubury, Augusta  
 Hull, J. M., Augusta  
 Hunt, K. S., Griffin

## I

Irvin, I. W., Albany

## J

Jackson, Zach W., Atlanta  
 Jenkins, J. C., Hartwell  
 Jenkins, J. I., Hartwell  
 Jennings, W. D., Augusta  
 Johnson, A. S., Elberton  
 Johnson, J. E., Elberton  
 Johnston, T. H., Athens

## K

Kellogg, W. C., Augusta  
 Kelly, G. L., Augusta  
 Kershaw, M. M., Augusta  
 Kilpatrick, A. J., Augusta  
 Kilpatrick, Chas. M.,  
     Augusta

Klugh, Geo. F., Atlanta  
 Kracke, Roy R., Decatur

## L

Lancaster, H. H., Hoschton  
 Landham, J. W., Atlanta  
 Lang, G. H., Savannah  
 Lang, W. V., Savannah  
 Lanier, J. E., Moultrie  
 Lanier, S. L., Sylvania  
 Lattimore, Ralston, Savannah  
 Lee, F. Lansing, Augusta

Lee, H. G., Millen  
 Lentz, C. S., Augusta  
 Levy, M. S., Augusta  
 Levington, H. L., Savannah  
 Lewis, J. B., Waynesboro  
 Lewis, John R., Louisville  
 Lewis, S. J., Augusta  
 Little, A. D., Thomasville  
 Lyle, W. C., Atlanta  
 Lord, C. B., Jefferson  
 Lowe, W. R., Midville  
 Lowry, T. Cartersville

## M

Macauley, H. A.,  
     Waynesboro  
 Marin, F. M., Shellman  
 Martin, R. V., Savannah  
 Martin, W. O., Jr., Atlanta  
 Maryott, C. H., Augusta  
 Matthews, M. F., Athens  
 Matthews, W. Eugene, Jr.,  
     Augusta  
 May, E. R., Lincolnton  
 Mays, J. R. S., Augusta  
 Mealing, H. G., Augusta  
 Meeks, D. H., Nicholls  
 Michel, H. M., Augusta  
 Miller, Clifford, Portal  
 Miller, R. L., Waynesboro  
 Minchew, B. H., Waycross  
 Mitchell, S. C., Louisville  
 Mobley, J. W., Jr.,  
     Milledgeville  
 Modley, J. W., Sr.,  
     Milledgeville  
 Montfort, J. M., Atlanta  
 Montgomery, R. C., Butler  
 Mooney, A. J., Statesboro  
 Moore, G. Y., Cuthbert  
 Morrison, A. A., Savannah  
 Morrison, H. J., Augusta  
 Moses, W. M., Uvalda  
 Mosteller, R., Augusta  
 Mountain, Geo. W., Augusta  
 Mulherin, F. X., Augusta  
 Mulherin, Philip A., Augusta  
 Mulherin, W. A., Augusta  
 Mulkey, Q. O., Millen  
 Murphey, Eugene E.,  
     Augusta

Myers, Wm. H., Savannah

## Mc

McAllister, J. M. C.,  
     Rochelle  
 McArthur, T. J., Cordele  
 McCall, J. T., Rome  
 McCarver, W. C., Vidette  
 McClintic, J. K., Monroe  
 McClung, R. H., Atlanta  
 McCord, Jas. R., Atlanta

McCord, M. M., Rome  
 McCullough, K., Waycross  
 McCurdy, E. C., Shellman  
 McCurdy, W. T., Augusta  
 McDaniel, J. G., Augusta  
 McDougall, Wm. L., Atlanta  
 McElveen, J. M., Brooklet  
 McGeary, W. C., Madison  
 McGee, H. H., Savannah  
 McGibony, J. R., Greensboro

## N

Nash, Thos. C., Philomath  
 New, J. E., Dexter  
 Newberry, R. E., Atlanta  
 Newsom, E. T., Union Point  
 Newsom, N. J., Sandersville  
 Norvell, J. T., Jr., Augusta

## O

Oertel, T. E., Augusta  
 Oetjen, Leroy H., Augusta  
 Oliphant, J. B., Mitchell  
 Oppenheimer, R. H.,  
     Emory University  
 Osborn, P. W., Augusta  
 Overby, N., Sandersville  
 Owens, J. D., Augusta

## P

Page, Hugh N., Augusta  
 Palmer, J. W., Ailey  
 Parkerson, I. J., Eastman  
 Parkerson, S. T., Augusta  
 Parrish, Fred A., Augusta  
 Patterson, F. D., Cuthbert  
 Paterson, J. C., Cuthbert  
 Patton, Fred J., Atlanta  
 Paullin, Jas. E., Atlanta  
 Peacock, E. S., Harrison  
 Peacock, J. D., Wadley  
 Penland, J. E., Waycross  
 Pennington, C. L., Macon  
 Perkins, Henry R., Augusta  
 Perkins, M. E., Millen  
 Phinizy, Irvine, Augusta  
 Pierce, L. W., Macon  
 Pilcher, J. J., Wrens  
 Pinholster, J. H., Augusta  
 Pipkin, H. A., Augusta  
 Poer, D. Henry, Atlanta  
 Price, W. T., Augusta  
 Pruitt, M. C., Atlanta  
 Pund, Edgar R., Augusta

## Q

Quattlebaum, Julian K.,  
     Savannah

## R

Rawls, L. L., Macon  
 Ray, A. T., Sharon  
 Reavis, W. F., Waycross  
 Redfearn, J. A., Albany  
 Redmond, C. G., Savannah

Revell, S. T. R., Louisville  
 Reynolds, H. I., Athens  
 Rhodes, Jno. A.,  
     Crawfordville  
 Rhodes, R. L., Augusta  
 Rhyné, Percy, Augusta  
 Richardson, C. H., Jr.,  
     Macon  
 Richardson, R. W., Macon  
 Ridley, C. L., Macon  
 Riner, C. R., Savannah  
 Roberts, C. W., Atlanta  
 Roberts, O. W., Carrollton  
 Roberts, Stewart R., Atlanta  
 Robertson, J. Righton  
 Robhan, Leonard J., Augusta  
 Rogers, J. T., Augusta  
 Rogers, T. E., Macon  
 Rollins, J. C., Dalton  
 Rosenberg, H. J., Atlanta  
 Roule, J. Victor, Augusta  
 Rozar, A. R., Macon  
 Rushing, W. E., Millhaven

## S

Sage, Dan Y., Atlanta  
 Sanchez, S. E., Barwick  
 Sauls, H. C., Atlanta  
 Saunders, Albert F., Valdosta  
 Savage, C. P., Montezuma  
 Scharnitzky, E. O., Augusta  
 Schwalb, O. W., Savannah  
 Schwall, E. W., Milledgeville  
 Schwartz, E. W., Augusta  
 Scoggins, P. T., Commerce  
 Scott, W. M., Milledgeville  
 Seaman, H. A., Waycross  
 Selman, W. A., Atlanta  
 Sessions, J. H., Homerville  
 Shallenberger, W. F., Atlanta  
 Sharp, C. K., Arlington  
 Sharples, H. F., Jr.,  
     Savannah  
 Shaw, H. W., Augusta  
 Shearouse, Wm., Savannah  
 Sherman, J. H., Savannah  
 Sigman, John M., Macon  
 Smith, A. C., Elberton  
 Smith, B. H., Keysville  
 Smith, E. C., Donalsonville  
 Smith, Geo. B., Rome  
 Smith, Geo. L., Swainsboro  
 Smith, H. P., Pearson  
 Smith, J. H., Valdosta  
 Smith, J. M., Cochran  
 Smith, J. Raymond, Augusta  
 Smith, M. R., Cordele  
 Snelling, U. R., Augusta  
 Soper, R. W., Augusta  
 Stanford, J. W., Trion  
 Stapleton, J. L., Augusta

Stelling, Richard N., Augusta  
 Stewart, W. K., Louisville  
 Story, Frank C., Jesup  
 Stovall, J. T., Augusta  
 Sutton, W. H., Midville  
 Sydenstricker, V. P.,  
 Augusta

## T

Taylor, Ralph L., Davisboro  
 Teasley, B. C., Hartwell  
 Temples, Leo. G., Augusta  
 Tessier, L. P., Augusta  
 Thomas, D. R., Jr., Augusta  
 Thompson, C., Millen  
 Thompson, E. F., Valdosta  
 Thrash, E. C., Atlanta  
 Thurmond, J. W., Augusta  
 Timmons, C. C., Augusta  
 Todd, W. Albert, Jr.,  
 Augusta  
 Toepel, Theodore, Atlanta  
 Tolleson, H. M., Habira  
 Touchton, Geo. L.,  
 Savannah  
 Tracy, J. L., Augusta

## FRATERNAL DELEGATES AND VISITORS

Anderson, B. F., Sellers, Ala.  
 Bird, B. Cosby, Montgomery, Ala.  
 Bishop, W. G., Greenwood, S. C.  
 Brodie, J. E., Greenwood, S. C.  
 Burns, Henry T., New York City  
 Cason, E. S., Birmingham, Ala.  
 Damren, Fred L., Augusta  
 Fort, F. L., Jacksonville, Fla.  
 Fowler, A. H., Langley, S. C.  
 Gaines, T. R., Anderson, S. C.  
 Godard, R. F., Quincy, Fla.  
 Green, Henry, Dothan, Ala.  
 Harris, W. G., Jacksonville, Fla.  
 Howell, J. R., Aiken, S. C.  
 Kennedy, G. L., Greenwood, S. C.  
 Mattie, W. H., North Augusta  
 Neel, G. P., Greenwood  
 Neill, Newman J., Deaver, Wyo.  
 Oetjen, G. F., Jacksonville, Fla.  
 Porro, F. W., Charleston, S. C.  
 Thacker, V. J., Dothan, Ala.  
 Turner, H. P., Greenwood, S. C.  
 Wyman, M. H., Columbia, S. C.  
 Van De Vrede, Miss Jang, R. N., Atlanta  
 Walden, C. A., Aiken, S. C.

## INVITED GUESTS

Lahev, Frank H., Boston, Mass.  
 Lynch, Kenneth M., Charleston, S. C.  
 Wright, Chas. B., Minneapolis, Minn.

COMMERCIAL EXHIBITORS AND  
REPRESENTATIVES

Estes Surgical Supply Company, Atlanta  
 Searle & Co., G. D., Chicago, Ill.  
 Bray, W. M., Atlanta  
 Harrison, B. J., Atlanta

Traylor, Geo. A., Augusta  
 U  
 Upchurch, W. A., Atlanta

## W

Wade, A. C., Augusta  
 Wahl, Ernest F.,  
 Thomasville  
 Waits, Chas. E., Atlanta  
 Walker, D. D., Macon  
 Wall, C. K., Thomasville  
 Wall, J. Cox, Eastman  
 Wallace, J. W., Douglas  
 Ward, Chas. D., Augusta  
 Ward, G. A., Elberton  
 Ware, F. L., Warrenton  
 Waring, A. J., Savannah  
 Waring, T. P., Savannah  
 Wasden, C. N., Augusta  
 Watkins, E. C., Brooklet  
 Watson, F. M., Augusta  
 Wagoner, Roger W., Augusta  
 Webb, F. L., Macon  
 Weeks, Richard B., Augusta  
 Wells, W. F., Atlanta

Wheat, R. F., Bainbridge  
 Whelan, E. J., Savannah  
 Whitely, Seals, L.,  
 Cedartown  
 Wicker, R. H., Rome  
 Wilcox, Everard A., Augusta  
 Wilson, E. B., Augusta  
 Wilson, Ricard B., Atlanta  
 Wilson, Samuel, Yatesville  
 Winchester, M. E., Atlanta  
 Wise, S. P., Americus  
 Wood, D. L., Atlanta  
 Wood, O. S., Washington  
 Woods, O. C., Augusta  
 Woodward, Wade, Decatur  
 Wooten, L. O., Augusta  
 Wright, Geo. W., Augusta  
 Wright, John C., Augusta  
 Wright, Lewis H., Augusta  
 Wright, Peter B., Augusta

## Y

Yampolsky, Jos., Atlanta  
 Youmans, C. R.,  
 Milledgeville  
 Young, W. W., Atlanta

Mills, C. W., Atlanta  
 Culpepper, J. W., Atlanta  
 Davis, LaRue, Chicago, Ill.

General Electric X-Ray Corporation, Chicago  
 Eason, L. H., Atlanta  
 Lang, E. A., Atlanta

Harrower, Laboratory, Glendale, Calif.  
 Seyle, G. L., Atlanta

Horlick's Malted Milk Corp., Racine, Wis.  
 Todd, J. M., Atlanta

Hanovia Chemical and Manufacturing Com-  
 pany, Newark, N. J.  
 Boll, Frank J., Columbia, S. C.  
 Shaw, H. M., Atlanta

Mead Johnson & Co., Evansville, Ind.  
 Gilmore, J. H., Atlanta

Merrell-Soule Company, New York City  
 Drv Milk Company, New York City  
 Darden, Henry R., Atlanta

Mosby Company, The C. V., St. Louis, Mo.  
 Baker, W. M., Decatur, Ga.

Petrolager Laboratories, Inc., Chicago, Ill.  
 Williams, B. J., Chicago, Ill.

Saunders, W. B., Company, Philadelphia, Pa.  
 Neely, Frank B., Montgomery, Ala.

S. & H. X-Ray Company, Atlanta  
 Marlowe, J. F., Atlanta

Surgical Selling Company, Atlanta  
 Jarrell, R. H., Atlanta  
 Kleiner, W., Atlanta

Wocher & Son Company, The Max,  
 Cincinnati, Ohio  
 Perryman, Ben, Atlanta



## CONSTITUENT COUNTY SOCIETIES 1930\*

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Bartow	A. L. Horton, Taylorsville	H. C. Pearson, Cartersville
Ben Hill	G. W. Willis, Ocilla	L. S. Osborne, Fitzgerald
Bibb	J. D. Applewhite, Macon	R. C. Goolsby, Jr., Macon
Blue Ridge	J. M. Daves, Blue Ridge	C. B. Crawford, Blue Ridge
Brooks	E. L. Jelks, Quitman	R. E. McClure, Quitman
Bulloch-Candler-Evans	W. D. Kennedy, Metter	W. E. Simmons, Metter
Burke	J. M. Cook, Sardis	W. W. Hillis, Sardis
Butts	A. F. White, Flovilla	R. L. Hammond, Jackson
Campbell	W. R. Camp, Fairburn	A. J. Green, Union City
Carroll		H. J. Goodwyn, Carrollton
Chatham	Lee Howard, Savannah	H. H. McGee, Savannah
Chattooga	E. M. Jennings, Menlo	H. D. Brown, Summerville
Cherokee	J. P. Turk, Nelson	George C. Brooke, Canton
Clarke	J. A. Hunnicutt, Jr., Athens	M. A. Hubert, Athens
Clayton-Fayette		H. D. Kemper, Jonesboro
Cobb	W. M. Gober, Marietta	L. L. Welch, Marietta
Colquit	J. J. C. Wright, Doerun	T. H. Chesnutt, Moultrie
Coffee	D. H. Meeks, Nicholls	W. L. Hall, Nicholls
Cook		W. M. Shepard, Adel
Coweta		A. A. Barge, Newnan
Crisp	G. G. Lunsford, Cordele	T. J. McArthur, Cordele
Decatur-Seminole		W. L. Wilkinson, Bainbridge
DeKalb		J. R. Evans, Decatur
Dooly	R. H. Pate, Unadilla	F. E. Williams, Vienna
Dougherty	N. R. Thomas, Albany	I. M. Lucas, Albany
Elbert	A. C. Smith, Elberton	B. B. Mattox, Elberton
Emanuel	A. C. Johnson, Garfield	R. C. Franklin, Swainsboro
Floyd	J. H. Mull, Rome	E. J. Radcliffe, Rome
Forsyth	F. C. Holden, Cumming	J. A. Otwell, Cumming
Franklin	S. D. Brown, Royston	B. T. Smith, Carnesville
Fulton	James N. Brawner, Atlanta	Howard Hailey, Atlanta
Glynn	H. L. Akridge, Brunswick	F. N. Aldrich, Brunswick
Gordon	B. W. Fite, Resaca	W. R. Richards, Calhoun
Grady	Eugene Clower, Cairo	J. V. Rogers, Cairo
Greene		J. R. McGibony, Greensboro
Gwinnett	J. C. Orr, Buford	D. C. Kelley, Lawrenceville
Habersham	J. B. Jackson, Clarksville	R. B. Lamb, Demorest
Hall	H. K. Phillips, Helena	Pratt Cheek, Gainesville
Hancock	Horace Darden, Sparta	H. L. Earl, Sparta
Hart		W. E. McCurry, Hartwell
Henry	J. G. Smith, McDonough	H. C. Ellis, McDonough
Houston-Peach	J. H. Riley, Perry	Horace E. Evans, Perry
Jackson	H. E. Crow, Talmo	J. C. Bennett, Jefferson
Jasper		E. M. Lancaster, Shady Dale
Jefferson	J. J. Pilcher, Wrens	S. T. R. Revell, Louisville
Jenkins	M. E. Perkins, Millen	C. Thompson, Millen
Johnson	H. B. Bray, Wrightsville	J. G. Brantley, Wrightsville
Jones	W. J. Waits, Gray	J. D. Zachary, Gray
Lamar	C. H. Willis, Barnesville	J. M. Rogers, Barnesville
Laurens	J. J. Barton, Dublin	O. H. Cheek, Dublin
Lowndes	G. T. Crozier, Valdosta	B. G. Owens, Valdosta
Macon	G. W. Nelson, Marshallville	H. C. Derrick, Oglethorpe
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Meriwether		R. B. Gilbert, Greenville
Mitchell	C. L. Roles, Camilla	C. A. Stevenson, Camilla
Monroe	G. H. Alexander, Forsyth	J. O. Elrod, Forsyth

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Ocmulgee—(Bleckley, Dodge, Pulaski)	W. F. Massey, Chester	A. R. Bush, Hawkinsville
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Putnam	V. H. Taliaferro, Eatonton	E. F. Griffith, Eatonton
Rabun		J. A. Green, Clayton
Randolph	F. M. Martin, Shellman	G. Y. Moore, Cuthbert
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Washington	F. B. Rawlings, Sandersville	W. M. Cason, Sandersville
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Wilkes	L. M. Ellis, Washington	H. T. Harriss, Washington
Worth	J. L. Tracy, Sylvester	Gordon S. Sumner, Sylvester

\*Names of officers omitted will be included in future reports and Directory issue of Journal, if reported to the Secretary-Treasurer.

### HISTORY OF MEDICINE IN GEORGIA

Any data in reference to the practice of medicine in Georgia which may be of value to the committee for compiling a Medical History will be gratefully received. If anyone having such material in his or her possession will forward to the Secretary-Treasurer it will be acknowledged and returned when the work is completed.

**AWTRY & LOWNDES  
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### DRUG ADDICTS

Drug and Alcoholic patients are humanely and successfully treated in Glenwood Par Sanitarium, Greensboro, N. C.; reprints of articles mailed upon request. Address W. C. Ashworth, M.D., Owner, Greensboro, N. C.

# THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

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## ADDRESS BEFORE WOMAN'S AUXILIARY†

G. Y. MOORE,\* M. D.  
*Cuthbert*

*Madam President:*

It is always an inspiration and pleasure to talk to the ladies of the Woman's Auxiliary.

As Councilor of the Third District, in making my rounds I made it a point to meet the wives of the doctors whenever possible, especially at the district meetings. This year, in making my broader rounds over the State, I want still to meet all the doctors' ladies and to work toward bringing the interests of the State Medical Association and Woman's Auxiliary closer and closer together. It is my ambition to get Georgia 100 per cent membership in the Association, and I know if I can get the women interested I will not have a particle of trouble. The surest way to secure good attendance at the county and district meetings is to have the women equally interested in attending their Auxiliary meetings at the same time.

Mathew Arnold once said that when three Americans get together they organize. Sometimes I think this zeal for organization is overdone—so much overlapping, so little correlation, frequently so vague a notion as to the purpose for which the organization exists. The only way to overcome these difficulties is to map out a clearly defined program, to have its object worthy of the most diligent zeal, and to win for its support the interested cooperation of the body's entire membership.

Down in the Third District I have sometimes heard the ladies say, "But what good

is the Auxiliary and what is the object for which we, as an organization, exist?" First and foremostly, I always reply, first, because it gives your professional husbands such a sense of pride that you have allied yourselves with the scientific interests of their life work; and second, because it brings into cordial social relationship the many brilliant, good women who are holding up the hands and urging to greater usefulness the medical profession of Georgia.

Today, however, I would like to suggest to you ladies here that, aside from these two mentioned good reasons for your existence, in my opinion, there is a service in Georgia which you wives of scientific, professional men can wisely appropriate, and which, if you should adapt it as a State-wide program for your Auxiliaries, can bring about results of untold benefit to Georgia and prove grandly worthy of your loyal membership.

Dr. Dancy wisely sensed the fact that for women to work effectively they must have a concrete idea in view. It was at his suggestion that the Auxiliaries last year undertook that splendid program of advocating the education of Georgia youth in medicine, and of making up a scholarship fund to make such education possible for deserving boys. It was a grand idea and some of the larger Auxiliaries have gone forward rapidly in raising this fund. Many of the smaller Auxiliaries, however, have felt their inability to raise sufficient money to make theirs a very effective service in this line, and it is particularly to such Auxiliaries of rural counties that I come with additional suggestion for your program of work this year. Go ahead with the scholarship fund, augment it, work for it, lend your cooperation, even though expressed in small figures, to its accomplishment. At the same time I am convinced that

†Address before the sixth annual session, Augusta, Ga., May 14, 1930.

\*President-Elect of the Medical Association of Georgia, 1929-1930.



in addition to this concrete objective there is for you this year, as never before, an opportunity to undertake another service peculiarly appropriate to your organization and peculiarly appealing to the wise, educated womanhood within the ranks of your membership.

In March of this year there went out to representative citizens of Georgia a call from Governor Hardman requesting them to come together in conference to consider the advisability of forming in Georgia a Council for Child Health and Protection. This meeting was held in Athens on April 2nd and was largely attended by representatives of all forces who are working for Georgia's betterment in the fields of health education, and welfare. There were present also representatives from the American Child Health Association and other national agencies of child welfare. They came, urging that Georgia line herself up with the great nation-wide movement for national betterment of American childhood, as it is being studied, worked for, and guided by the planning committee of the recent White House Child Welfare Conference.

"The greatest asset of a race is its children," said President Hoover when at his bidding this White House Conference was called. That leaders in Georgia agree with him was evidenced by the fact that when they held this meeting at Athens on April 2nd they organized and chose officers for a Georgia Council of Child Health and Protection, thus placing our State in line for work and improvement of methods in the fields of social service that touch Georgia childhood. All present, whether representing the agencies of education, or of health, or of social service, realized and went on record as indorsing the idea that, no matter what opportunities lie ahead for our children, there can be no doubt that sound minds in sound bodies form the structure upon which everything else must be built. It was a great surprise, carrying with it a grave responsibility, that at that organization meeting of this new Council of Child Health, they gave me the high honor of naming me the Council's first President. It is about this kind of work that I want to

talk to you ladies this afternoon—for it is work peculiarly allied to medical service in Georgia, and womanly service in every Georgia community.

If this State Council is to be effective it means there must be some local council in each Georgia county through which the message of Health and Protection must be interpreted directly to every little Georgia child. I can think of no body either of men or of women more perfectly suited to undertake the organization of such local forces to this end than the Woman's Auxiliary of the Medical Association of Georgia. Particularly is this true of the rural counties where agencies for health and welfare are so pitifully unorganized. I feel sure that in such localities it is the family doctor who more than anyone else knows the local conditions of underprivileged, undernourished childhood. He not only knows it from the angle of contacting the child who is sick, but he also knows it from the social, economic standpoint of conditions in the homes of his patients. Sickness is sometimes the cause of economic troubles; sometimes it is the direct result. Economic troubles are invariably mixed up with some sort of educational handicaps; and the three economic, educational, health problems are always inseparable, in any adverse social situation. You wives of practicing physicians know well the heartaches, the burdens the family doctor bears because of his constant contact with such three-cornered problems, and his inability alone to overcome them. It is not his place, nor his obligation, to do more than he is doing always in giving free medical care. He needs the community at large to know the attending circumstances and as a community to organize to meet them. Not until our communities are organized to study such conditions and to put into operation adequate measures for improving them, can we hope to achieve anything very definite for healthier, happier, more wisely protected childhood.

The White House Conference on Child Health and Protection has convinced its leaders of two primary necessities for successful functioning of their national program: First, there must be a more unified program served

jointly by the various forces of education, health, and welfare in every State; and second, there must be in every community a well-established agency through which such a program can be effectively reflected to the local good. Quoting from Dr. Wilbur, Chairman of the White House Committee, I would have you ladies hear:

"Those of you who are primarily interested in modern education realize that education cannot be disassociated from the welfare of the modern child. Those of you who are interested in public health know that it cannot be disassociated from education or from welfare. You know perfectly well that without health and education you can get nowhere in work of child welfare. If we can all unite the forces of education, of health, of welfare in a common program, I think we can develop in the course of a few years a substantial national program for the child that will be one of the glories of our country."

It is to appeal to you wise women for such unification of forces in your home communities that I come with this message this afternoon. I am not suggesting that you form any new organization, nor that you raise any funds, but I am urging that you seriously consider some systematic plan whereby your Auxiliary in each county may work to correlate and coordinate all the already existing forces within those counties toward the perfecting of efficient machinery that will bring better conditions of normal, happy, healthy childhood about. Take these questions to the thinking people in your home towns:

Do you know under what conditions your children are living during the hours they are in school?

Do you know the teachers and do they know you?

Do you know the health program of the school your children attend?

Do you cooperate with the school in its efforts to make and keep your children well?

Are you doing your part to be sure your children have appropriate medical treatment if they are in need of it?

Do you know what your community is

doing for health protection, for sanitation, for quarantine against contagious diseases and immunization against them?

Are you cooperating in seeing that pregnancy in your town is made safe for all mothers and not just for those who can afford expensive types of medical care?

Have you done your part toward securing sufficient health care for every baby and pre-school child in your community?

Are you not only giving your own children the healthful home surroundings that are essential for well-being, but also seeing that this same opportunity is available for every little child in your town?

"The answers to such questions," says Dr. Josephine Baker, "have just as great bearing upon your child's future welfare and adjustment to life as any formal education may have and upon the answers to these questions will depend the square deal or lack of it that the children of your communities will have."

The Child's Bill of Rights, as drawn up by President Hoover, grandly expresses the ideal toward which work for Child Welfare should be directed.

"There should be no child in America," says this great Bill,

"That has not been born under proper conditions,

That does not live in hygienic surroundings,

That ever suffers from undernourishment,

That does not have prompt and efficient medical attention and inspection,

That does not receive primary instruction in the elements of hygiene and good health,

That has not the complete birthright of a sound mind in a sound body,

That has not the encouragement to express in fullest measure the spirit within, which is the final endowment of every human being."

That Georgia needs her citizens to work for such a program is revealed in a few significant facts: There are 6,411 of kindergarten age and 182,426 in the first grade. Out of 867,895 school children in Georgia,

only 144,169 are having regular annual physical examinations. This does not include Atlanta and Columbus. Our children of school age are showing as high rate of undernourishment and other physical defects as they did twenty years ago. At least thirty out of every hundred school children are suffering from some form of physical defect that might have been corrected or might have more easily been prevented. Only a small number of communities have the advantage of the magnificent chance to wholly eradicate diphtheria and scarlet fever, those terrible menaces in early childhood. At conservative estimate, less than two per cent of the pre-school age children are getting the form of health supervision that will bring them to school in sound health. In spite of what our State Board of Health, our civic organizations, our unselfish doctors, public health nurses, interested leaders are doing along these lines, the problem of child health in Georgia is still one of outstanding importance. I am calling on you women of the Georgia Medical Auxiliaries to help Georgia solve it.

As I see it, the problem is that communities themselves have failed to grasp the responsibility and have too long left it to the individual parent. Whether the community wants it or not, the very complexity of modern conditions makes it a community obligation. The old family relationships have broadened; the family has widened to the community group, and as the group recognizes its obligation toward all its weaker members, only so will be brought about real community welfare.

Take these thoughts home with you, ladies. Every community demands leadership that will guide its diversified efforts into a unified program for healthier, happier childhood. Work through your Auxiliary to bind together all the forces of education, health, welfare in your home counties into a well-planned, closely coordinated, sufficiently financed year-round program—a program for health and protection of childhood. Only as the States are organized can the National Council function within them; only as the counties are ready can our State Council make the work effective throughout

the State. What an opportunity you have to serve as the instrument for bringing about active personal cooperation of parents and citizens and organizations and binding all agencies into a County Council for child health, protection, and welfare in your home localities. The humanitarian appeal is to your highest instincts and endeavors. Your home town belongs to you. Lead its people into thinking that what it does or does not do is each citizen's immediate business; and strive to bind all your fellow-citizens together in a program that will determine what standards should be maintained, and having so determined, will work that every little child will be given at least a fair deal. By such work on your part the very welfare of generations yet unborn in Georgia will be more surely protected.

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#### HOME TREATMENT OF PULMONARY TUBERCULOSIS\*

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J. A. REDFEARN, M.D.

*Albany.*

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While tuberculosis is probably one of the oldest and most universally distributed diseases, the idea has been generally prevalent that treatment was necessarily much more successful in high and preferably dry altitudes. It is a great misfortune that this idea has become so widespread because, the climate has little, if anything, to do with successful treatment. By far more important are the essentials of bed rest and proper nourishment. With occasional exceptions, tuberculosis patients will fare better at home, wherever that may be, if they are able to take the proper rest and eat the proper food. During certain seasons of the year it is more pleasant in mountainous regions, but the average patient can ill afford the expensive resorts and does not like the thought of leaving home, relatives and friends.

For several years the writer has had to argue this point with each patient, for this migratory idea is deeply ingrained in the public mind as a result of generations of doctors who outlined treatment and urged

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\*Read before the Second District Medical Society, Albany, Ga., April 11, 1930.



climate as of greatest importance. Occasionally it has so happened that patients would refuse to leave home for treatment and have been indifferently treated at home when found to be in an advanced stage of the disease. Climate, still uppermost in mind, caused the preparing of a back porch where so-called outdoor sleeping in strange surroundings, often-times amid flapping curtains, howling winds and blowing rains intent upon giving the patient fresh air at any cost. Certainly this is not altogether human treatment, a fact which is quickly grasped by the unfortunate patients, and tends to lower resistance and usher in a despairing spirit. Despite the disease the patient is still human and should be treated as such and placed in the usual comfortable sleeping quarters with reasonable ventilation and sunlight. The room may be heated to suit the comfort of the patient and attendants.

The majority of cases occur during the greatest struggling period of life when there is generally only an equity in the home. The father may have a good job and be living a useful life in his community. As soon as the diagnosis of pulmonary tuberculosis is made and the patient and his friends have had time to hold a consultation, the physician is frankly asked whether it would not be better to sacrifice the home and its furnishings, give up a good position, and go west. If the treatment of pulmonary tuberculosis was similar to the treatment of the average surgical case or the patient had sufficient financial resources, the choice might well be left with the individual, but the disease runs a chronic course lasting on an average of six months to two years before recovery, and it is obvious that treatment at home is the sensible method to pursue in most instances. Thousands of people have given up good positions and useful places and gone west to find many others seeking work and not finding it. Naturally the small savings are soon spent thus creating serious social problems which upset individuals and communities.

Institutional treatment is a distinct advantage, mainly because patients are taught how to live and how to get well and keep well and not because the institution happens

to be situated at some high point. When physicians generally accept this idea, which has been gaining ground, and pass it on to the public it will re-act favorably, mainly because doctors, through greater interest, will more often make a diagnosis of incipient pulmonary tuberculosis.

Doctor Cabot made the statement before his class in 1926 that the doctors in Massachusetts for the most part had accepted the points outlined above and had put into practice these ideas. That state has institutions scattered all over it, thus making it possible to place near home, relatives and friends, those who were placed in such institutions, but many were successfully treated at home. Massachusetts has an institution where the incurables are sent with the knowledge that they are never to leave it again during life. A visit to these patients would not suggest that this happy lot of people has ever known of such a plan. Everything is done to make them comfortable and happy by giving the best food, entertainment and comfort, but they are never allowed to leave because of danger of spreading the disease. Doctor Cabot was of the opinion that within ten years this state would not have any problem in controlling and treating this disease, as a result of earlier diagnosis. In discussing climatic conditions he made the statement that at Saranac Lake, where sub-zero temperature reigned a good part of each winter, and cold winds and frost along with dampness most of the balance of the year, statistics compare favorably with any dry, arid place where tuberculosis patients were treated. It has long been taught that tuberculosis occurred in about eighty-five per cent of the people in congested centers, the majority of whom have recovered without ever knowing they had the disease. This is mentioned as an argument against emphasizing the importance of climate.

The greatest essential in treatment is rest, both mental and physical. Bed rest twenty-four hours a day should be kept up two or three months or longer, depending upon symptoms, the most important of which are fever, loss of weight and strength, poor appetite, vague symptoms of indigestion and persistent tachycardia. The surroundings should

be pleasant and cheerful, but never noisy and exciting. In critically ill patients rest should be absolute, not even allowing the patient to feed himself. On the other hand some patients may be permitted to use the radio and practice quiet reading for a short time each day. Local rest by applying weights and strappings sometimes is beneficial in unilateral pulmonary tuberculosis. A well balanced diet consisting of milk, eggs, fresh fruits, fresh vegetables, fresh meats, breads and sweets in moderation should be given. Brewer's yeast is rich in vitamins and will sometimes stimulate the appetite. Cod liver oil is beneficial for the same reason.

If after resting in bed for two or three months or longer, the patient has gained weight and strength and has a good appetite and a satisfactory pulse rate and temperature, he may be allowed to sit up, beginning with fifteen minutes the first day and gradually increasing if symptoms are favorable. When weather is pleasant outdoor life is a delightful change and very beneficial. After reaching the point where the patient is up with the exception of ten hours at night, one hour in the forenoon and two hours in the afternoon it is best to wait for several weeks and then begin with a little walking and short rides, again keeping close check on any unfavorable signs. In due time moderate outdoor exercise may be permitted followed by a return to work. It is well at this time to drive home the thought that exercise must always be granted grudgingly and undue exertion must be avoided throughout life. Another important point to stress is not to make too frequent examinations when all signs indicate continued improvement. Percussion and deep breathing will not furnish knowledge which the doctor does not already have, and it may do the patient harm. Sanitation should be rigidly enforced, with particular attention to the danger of the uncovered cough.

The following case is reported to illustrate the points emphasized in my paper:

#### REPORT OF CASE

A married American white woman came to the office complaining of a dry cough and loss of weight. The present illness apparently began several weeks ago when she suffered hemoptysis of about a tablespoonful

of blood. Her past history was essentially negative. The family history was significant in that the patient's sister was an arrested case of pulmonary tuberculosis. The patient had not lived with her sister for many years before the onset of her illness. The patient claimed that she had been losing weight and had suffered a dry cough for more than a year.

The physical examination showed a well developed but poorly nourished white woman. She was 43 years old and weighed 104 lbs. Her height was 5 ft. 1 in. and her usual weight was 131 lbs. She had lost 27 lbs. in the past year. At 10 o'clock in the morning her temperature was 100 degrees. Her head, ears and nose were negative but there was slight exophthalmos and moderate enlargement of the thyroid gland. The tonsils were enlarged, cryptic and infected. The remainder of the physical examination was negative except for the examination of the chest which showed definite increased dullness in the upper one-third of the left chest. Fine explosive rales were heard over this area following cough.

The x-ray study of the lungs showed a pneumonic type of tuberculosis involving the left upper lobe. In this same area there were two small cavities, each about the size of a dime. There was cloudiness in the right apex above the clavicle.

It was thought best to have her tonsils removed. Doctor I. W. Irvin performed the operation under local anaesthesia and she stood the operation very well. Her rest treatment was then begun under conditions which were far from ideal. Her husband has just failed in business and the only place she has to live is in a large storeroom with a concrete floor. She was alone most of the time. After two weeks in bed her cough ceased and her appetite improved. After two and one-half months her weight was back to 131 lbs. and her temperature and pulse were normal. She was allowed to sit up in a chair for fifteen minutes a day, gradually increasing a few minutes each day. She has made an uneventful recovery and all indications are that she will soon be an arrested case.

#### INEFFICIENCY OF METAPHEN AS SKIN DISINFECTANT

The recently published experiments of Raiziss, Severac and Moetsch showing that metaphen in strengths of from 1: 500 to : 2,500 invariably sterilizes inoculated rabbit skin are invalid because the amounts of drug transferred to the subcultures have been shown to be sufficient to inhibit bacterial growth. Metaphen 1: 500, tested by a valid method, with exposure for five minutes and subsequent drying, cannot, according to the experience of Edward C. White and Justina H. Hill, Baltimore (*Journal A. M. A.*, July 5, 1930), be relied on regularly to sterilize normal human skin. Different individuals show considerable variation in difficulty of sterilization.

Roster of committees appointed by President, Dr. G. Y. Moore, is published on page 313.

## DIPHTHERIA PREVENTION IN GEORGIA\*

*With Special Reference to Latitude, Race,  
Sex, and Family Influences on the  
Production of Immunity*

H. B. JENKINS,† M. D.  
Thomasville

The treatment of children of all age groups with toxin-antitoxin without preliminary tests to determine the absence or presence of immunity to diphtheria is practiced extensively throughout Georgia. The little harm, if any, caused by giving toxin-antitoxin to a child already immune, the small cost of toxin-antitoxin, the saving of time for the physician and the lack of familiarity with immunity tests are reasons which have been given that favor the abandonment of immunity tests. This procedure, however, is only excusable in communities where a large percentage of the children are susceptible, in communities where the physicians are unable to obtain experienced help to do the tests or in private practice where only one or two children at the time present themselves for treatment. In group immunizations by health officers a great deal of time and money may be saved by confining toxin-antitoxin treatment of older children to those who are shown by immunity tests to be susceptible to diphtheria.

### HOW IMMUNITY IS PRODUCED AND METHODS OF TESTING FOR ITS ABSENCE OR PRESENCE

Toxin-antitoxin is given for the purpose of producing an antitoxic immunity to diphtheria. The temporary passive immunity possessed, as a rule, by the new born is a result of the transmission of antitoxin from the mother to the foetus through the placental circulation. The immunity found in many children and adults who have not received toxin-antitoxin results from one or more infections with virulent diphtheria bacilli which may, or may not, have produced clinical evidence of infection. For the purpose of determining the absence or pres-

ence of immunity, the Schick test has found practically universal favor. It consists of the intradermal injection of diluted diphtheria toxin which is neutralized by antitoxin in the blood of the immune person but is left wholly or partially free to produce a positive skin reaction in the susceptible person. For testing large groups of children the Schick test is practical. The readings are best made after four to seven days in order to avoid false reactions and toxin-antitoxin treatment of the susceptible children may be commenced when the readings are made. For physicians in private practice who wish to test individuals or small groups, the Kellogg<sup>7</sup> test may be used if arrangements can be made for having the test carried out in a central laboratory by an experienced observer. In the Kellogg test about 0.5 cc. of blood must be collected from the person to be tested and sent to the laboratory performing the test. Equal amounts of the serum and a standardized toxin are thoroughly mixed and after half an hour injected intradermally into a prepared site on a white guinea-pig. The readings are made in twenty-four to seventy-two hours. Less than 1/30 unit of antitoxin per cubic centimeter (1/30 unit per cubic centimeter considered protective amount) in the serum to be tested gives an unmistakable positive reaction at the site of injection and controls are possible which guard against deteriorated toxin and false negative reactions. Park and Schroder<sup>2</sup> have reported that the first dose of toxin-antitoxin, if given subcutaneously and as superficially as possible, will give a reaction which parallels the Schick reaction in young children. In older children they reported a 10 to 20 per cent increase in positive reactions by this method, but stated that some of these were persistent pseudo-reactions and that the error, if present, was on the right side. They recommended that the readings should be delayed until the sixth or seventh day to allow the pseudo-reactions to largely disappear, that those using the test for the first time control it with the Schick test and that it not be substituted for the Schick test in a retest.

### REVIEW OF LITERATURE

Following extensive investigation of antitoxic immunity in New York school chil-

\*This study was made while the author was Health Commissioner of Washington County.  
†Health Commissioner of Thomas County.



dren with the Schick test, Zingher<sup>3</sup> reported that the number of children immune to diphtheria was in direct proportion to the opportunity afforded them for contact with diphtheria bacilli, a higher percentage of susceptible children being found among the well-to-do or among those who lived under less crowded conditions. But negro children, in spite of crowded living conditions, gave a high percentage of positive tests. Italians were found to give the lowest percentage and Hebrews of a high social class the highest percentage of positive tests. Hereditary familial influence on the production of immunity was suggested in families where all the children of one family would give negative tests and all the children of another family with living conditions about the same would give positive tests. Frost<sup>4</sup> reported about the same percentage of positive tests among negroes and whites in Baltimore, but an incidence of clinical diphtheria among negroes about one-third that among whites. Wright,<sup>6</sup> after testing 210 adult negroes in Washington, D. C., reported that they possessed about the same degree of immunity as adult whites. Taliaferro,<sup>9</sup> in Honduras, found 10 per cent of 196 natives and 58 per cent of forty whites who gave positive Schick tests. Lavan and Black<sup>7</sup> found from 28 to 80 per cent positive in Kansas City schools, the lowest percentage being in schools attended mostly by Italians from congested sections of the city. Kelley, Stevens and Beatti<sup>8</sup> found from 68 to 80 per cent positive among rural school children in California, and Kidder<sup>5</sup> found 74 per cent positive among rural school children in Vermont. In the age group, 5 to 9 years, Kidder found 80.4 per cent positive, while in Alabama<sup>10</sup> only 46.7 per cent of this age group gave positive tests. A lower percentage of positive tests than observed in corresponding age groups of North America has been reported by Vieira<sup>11</sup> in Sao Paulo, Brazil; by Doull, Ferreira, and Pareiras<sup>12</sup> in Rio de Janeiro, Brazil; by Gomez, Navarro and Kapauan<sup>13</sup> in Manila, P. I., and Fletcher<sup>14</sup> in the Federated Malay States. Schmidt<sup>15</sup> found a high percentage of positive tests in Greenland. The variation in percentage of immunes in different latitudes is reviewed by Doull,<sup>10</sup> who regards subclinical

infections of diphtheria as more frequent in tropical climates than in colder latitudes where clinical forms of the infection are more common. Dudley<sup>17</sup> and Kelley, Stevens, and Beatti<sup>8</sup> have reported that females show a lower percentage of immunes than males. A study of the above references suggests that opportunity for contact with diphtheria bacilli is the dominant factor in producing immunity; that latitude plays an important role in affording opportunity for contact, sub-clinical infections and subsequent immunity; that racial factors may influence the prevalence of immunity; that differences may be observed in the percentage of immunes for the two sexes; and that hereditary familial influence may affect the production of immunity in individuals of certain family groups.

#### RESULTS OF SCHICK TESTS IN GEORGIA

This study was carried out in Washington County, Georgia, near the center of the State. The county has an area of over 600 square miles and a population of 12,000 whites and 16,000 negroes about evenly distributed over the county. A study to determine the relative immunity percentages of whites and negroes was suggested by the occurrence of thirty-four cases of diphtheria among the whites during the winter months of 1928-1929, while no cases were reported among the negroes. The results of Schick tests on 1,106 white school children and 681 negro school children are given in Table 1. Positive tests were observed in 25.4 per cent of the whites and in 10.7 per cent of the negroes.

#### INFLUENCE OF LATITUDE AND ITS RELATION TO DIPHTHERIA IN GEORGIA

The percentage of susceptibles in rural whites was lower than the percentages reported for other rural sections of the United States. This accords with the results of other investigators which show that a higher percentage of immunes is found in semi-tropical and tropical climates than in colder latitudes. The low percentage of positive tests found in white and negro school children in Georgia emphasizes the importance of preliminary tests to determine the percentage of immune children in any section where a diphtheria

TABLE 1.—RESULTS SCHICK TESTS, WASHINGTON COUNTY, GEORGIA, 1929

Group	Age	Number tested		Number positive		Per cent positive		
		Male	Female	Male	Female	Male	Female	Male and Female
Rural white school children	8-9 years	107	103	24	39	22.4	37.9	30.0
	10-14 years	306	346	47	97	15.4	28.0	22.1
	15-19 years	110	123	26	41	23.6	33.3	28.8
	20 years and over	3	8	2	5	66.6	62.5	63.6
	All ages	526	580	99	182	18.8	31.4	25.4
Rural negro school children	5-9 years	81	72	11	15	13.6	20.8	17.0
	10-14 years	147	162	12	18	8.2	11.1	9.7
	15-19 years	72	135	7	9	9.7	6.7	7.7
	20 years and over	5	7	0	1	0.0	14.3	8.3
	All ages	305	376	30	43	9.8	11.4	10.7

immunization campaign is planned. Where such tests show a high percentage immune, all children within the age group showing a high immunity rate should be tested and only those who are susceptible given the toxin-antitoxin treatment. It is especially important to treat the infant and pre-school groups if the greatest number of susceptibles are to be reached. However, the close contact of school children, even though a much smaller percentage of this age group are susceptible, calls for immunity tests and treatment of all those who give positive tests. This is especially important in communities where very little toxin-antitoxin has been given to the school children during their pre-school years. That immunization of the school child in Georgia is important, notwithstanding the low percentage of susceptible children in this group, may be seen from a study of the age groups in which the thirty-four cases of diphtheria occurred in Washington County. There were twenty-seven cases in school children, four in pre-school children, and three in adults.

#### A COMPARISON OF THE PREVALENCE OF IMMUNITY AMONG WHITES AND NEGROES

Because toxin-antitoxin had been previously recommended for all children below eight years, no immunity tests were done among the whites below this age. In the age group 8 to 9 years, 30 per cent of the whites gave positive tests, and in the age group 5 to 9 years, 17.7 per cent of the ne-

groes gave positive tests. In Alabama<sup>10</sup> 46.7 per cent of the white children in the age group 5 to 9 years were positive. Of the 1,106 white school children tested by the writer, 25.4 per cent were positive, and of the 681 negro school children 10.7 per cent were positive. Although the immunity rate among negroes in New York was reported low by Zingher<sup>8</sup> and about the same as among whites in Washington by Wright,<sup>5</sup> and in Baltimore by Frost<sup>4</sup> the results for all age groups in this study show a much higher rate of immunity among negroes than among whites. The negroes, as a race, naturally adapted to semi-tropical and tropical climates, may be better able than the whites to develop an immunity in warmer latitudes.

#### IMMUNITY IN MALES AND FEMALES

A decidedly higher percentage of positive Schick tests were found among the females than among the males. This was especially true in the white children tested. Although the male may be better able to develop immunity than the female, it seems more likely that other factors may account for the difference observed in these two groups in this study. There is a definite tendency among pre-school and school girls toward segregation in pairs or small groups for their social activities and thus limiting the opportunity for more general contact with others. The pre-school and school girls devote more attention to personal hygiene than the pre-school or school boys. This explanation is offered because the writer does not know of

TABLE 2—ARRANGEMENT IN FAMILY GROUPS OF WHITE SCHOOL CHILDREN OF WASHINGTON COUNTY, GEORGIA, SCHICK TESTED IN 1929

Family Group	Number families	Number children tested	Number children positive	Number families all children positive	Number families all children negative	Number families having positive and negative children	Per cent children positive	Per cent families all children positive
One child in family.....	333	333	122	122	211	0	36.6	36.6
Two children in family.....	176	352	91	19	104	53	25.9	10.8
Three children in family.....	88	264	50	4	54	30	18.9	4.5
Four children in family.....	28	112	15	1	19	8	12.3	3.6
Five children in family.....	9	45	3	0	7	2	6.7	0.0

other reasons which may account for the differences in immunity percentages of the two sexes.

#### HEREDITARY FAMILIAL INFLUENCE ON THE PRODUCTION OF IMMUNITY

The results of the Schick tests are tabulated in family groups in Table 2. The increased percentage of immunes among the children of the large family groups shows the importance of family contact in the production of immunity. The two-children family group had nineteen families in which both children were positive, the three-children family group four families in which all the children were positive, and the four-children family group one family in which all the children were positive. These results do not suggest to the writer any evidence of familial inability to develop immunity, but a probable normal variation from the average for a few families of the 392 families studied in these three groups.

#### CONCLUSIONS

1. Rural white school children in Georgia show a much higher percentage of immunes to diphtheria than is reported from other rural sections of the United States.

2. Rural negro school children show a much higher percentage of immunes than rural white school children.

3. The incidence of clinical diphtheria among whites is much higher than among negroes. The difference is greater than one would expect from results of immunity studies of the two races.

4. Negroes, as a race, naturally adapted to semi-tropical and tropical climates are better able than whites to develop immunity in warmer latitudes.

5. No evidence is found of familial inability to develop immunity.

6. The prevalence of immunity is much higher in the males than in the females.

7. Special efforts should be made to immunize infants and the children of the earliest ages in the pre-school group.

8. Children of school age should not be given toxin-antitoxin until after preliminary tests to determine the absence or presence of immunity.

9. A community immunization campaign should include immunity tests of all school children and the immunization of all susceptibles in this group.

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## THE MEDICAL PROFESSION AND THE CHANGING SOCIAL ORDER\*

### *A Consideration of Present-Day Problems*

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If one assumes in the outset that tradition as well as the State imposes upon the profession of medicine the duty and responsibility of providing adequate medical care for the sick and of furnishing leadership in measures designed to prevent communicable diseases, to eradicate potential industrial handicap arising out of injury, and to remove ignorance concerning the fundamental laws of health, there must at once be unanimity of opinion with respect to the unfinished status of our task in Georgia. Notwithstanding the noteworthy achievements made by our profession, supplemented by the educationable efforts of our efficient Commissioner of Health, handicapped as he is by wholly inadequate support from the State, there still remains, in all these domains, an embarrassing increment which drains the vitality of our citizenry to their great economic loss.

The growth of industry in the South calling for a higher level of work efficiency, the greatly augmented standards of living now so universal, the deferred payment plan of selling which has placed within reach of all the products of science and invention, have placed a premium on physical and mental fitness and attached to the question of earning power a new importance. It has become apparent even to the casual observer that good health underlies efficient workmanship. Employers of labor insist upon sound bodies

in this age of mass production as a necessary link in their program of controlled overhead expense.

With such revelations flowing from the expertly audited experiences of commerce, coupled with the accumulation of statistical knowledge growing out of the observations of industrial organizations concerned with the factor of lost time from preventable sickness, aggregating per employe seven days per year, it is not remarkable that they, as students of public affairs, should begin to inquire into the causes which furnish such a serious liability and to cast about for a speedy remedy. Since it is apparent that we are confronted with a condition destructive to the commercial, physical, and cultural growth of our section and since the remedy must concern itself with the use of that field of learning peculiarly belonging to the medical profession, may we not consider briefly some factors that have permitted the development of these ugly places on the body politic of our State. One might epitomize a controversial discussion in which many factors will be found to have a place by challenging the assumption that our profession can be justly charged with the derelictions responsible for the conditions evolved out of the exacting demands of modern business life. But to thus dispose of the question is to evade an issue and in the outset to sidestep a condition which society recognizes and which some of the best minds, both in the profession and without, are seriously trying to solve. Nor does it suffice to contend that our experience is common to that of the country as a whole and hence should be considered tolerable on the ground of universality. Theorize as we may, there remains the practical difficulty of satisfying popular disfavor whose spokesman lays upon us the blame for poor physical standards in workmen, without first applying toward the solution of the problem the best thought of which we are capable. What then are the agencies to be called to our assistance? Surely heading the list is the matter of general education. While secular education is not our function we as a profession are charged with and should assume responsibility for instruction along health lines by

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active support of our State Board of Health and other agencies committed to similar purposes. But it is not of health education that I desire specifically to speak. I direct your attention to the following growing problems bearing directly on the issues involved. First, the cost of medical care versus the pocketbook of some 60 per cent of our population. Second, the mounting costs usually considered as overhead attached to the office of the modern physician and imposed upon him through demands of specialized practice, ample office equipment, and high standards of education. Third, the problem of inadequate distribution of physicians. Fourth, the old line medical practitioner versus the new order, which compels us in our day to give thought to the business aspects of medicine and to adapt its services to an economic life of which it has become an ever-increasingly important part. Fifth, the rise of such social movements as compensation laws, industrial group insurance, contract practice, free and part-pay clinics.

Obviously time permits only of brief mention of a few points with reference to these issues. Concerning the cost of medical care, I venture the assertion that were it not for the economic problems involved in the form of physicians' fees, nurses' fees, hospital and druggists' charges, etc., a marked immediate reduction in disease incident to and lost time from preventable illness would be witnessed. This statement by no means intends to convey the idea that the modern physician, or for that matter the nurse, hospital, or druggist is overpaid. The fact remains, however, that society is so constituted economically that the rank and file of its citizens cannot avail themselves of the services which our profession is prepared to offer. The result is that preventive medicine lags while the physician strives to keep the wolf from the door through devotion of his time to patients presumed to be able to pay. Even then a goodly per cent of his anticipated income goes into unpaid bills, while he sees his annual income reduced to or below the level of the average semi-skilled American worker. In the great middle class lies the point of attack which must command the attention of both states-

men and medical leaders. This great body of our population, estimated at from 60 to 85 per cent, must, by some plan to be evolved, receive medical services on a remunerative plan. Is not the profession's experiment in the form of group practice, as well as the part-pay clinic and like arrangements, a partial answer already to this question? Would not properly supervised and well-ordered industrial insurance, written to cover selected groups, offer helpful financial relief, both to the profession and to a large block of our population? But you answer, these are the entering wedges of state medicine, against which we must raise an uncompromising voice. Others aver that they will give no quarter to these new encroachments on our profession, "Once for all delivered to the saints." And so the spirit of intolerance breaks on these rising tides. But let me try to maintain a position in support of these trends. Not even the most rabid advocate of socialized medicine directed by the State loses sight of the essential nature of the doctor's services to the program of race betterment even when this service is reduced to the level of a trade and evaluated only in its economic relation. The statesman of vision further knows that there must be preserved to the medicine of the future more than the cold facts of its science. Thoughtful lay students see in it an art—a wedding of both art and science—and recognize that the very essence of its value lies in the personal relation of physician to patient, a highly specialized service which grows in value as this relation is cultivated through mutual confidence. We of the profession are united in the opinion that this art in medicine must be preserved and consequently stand as a solid phalanx to contend for its preservation to the limit of our ability. We know, not by cold calculated theory, but by a common living experience, that if stripped of our art we become a floundering science on an uncharted sea without a worthy objective. We perceive that the human element actuates us in our efforts at scientific discovery and that it is that we may be better humanitarians, that we grapple at all with the evasive truths of science. We will have none of medicine that has had



exacted of it Shylock's pound. The State might conceivably institute a system of scientific medicine, but to practice its art with maximum results will always demand that a reasonable right of free choice of a physician be preserved to the patient. This human relation, so sacred to us, the program of State Medicine can never give. But shall we best fortify against these tendencies by an attitude of indifference to these problems so closely allied to it in nature. I think not. We must adopt a principle employed with increasing frequency and benefit between contending factions of mankind in many spheres. It is the expedient of the conference table, the Naval Conference, the World Court, if you will. Ours is an age of tolerance and arbitration. Through a properly constituted Liaison Committee supported by a profession that has informed itself with respect to the problem of contract practice, industrial insurance, compensation laws, free and part-pay clinics and the like, we must meet those responsible for their introduction and together discuss the conditions that have brought them into being, to the end that the spurious may be stopped and the true given our endorsement. Such medical leadership will be welcomed and must be speedily forthcoming if the services which these agencies seek to confer are to be preserved for our profession to whom they rightly belong. None will deny that these functions of medicine will be more effectively administered by physicians than through the layman, however deeply he may be imbued with the spirit of social service. Some argue, and may we not frankly admit its pertinence, that the great body of organized medicine has not sufficiently considered these problems and that when reviewed their published utterances have smacked largely of the partisan attitude. Let us then resolve to give to these questions the deliberate thought of which a great learned profession is capable, and endow our deliberations with that candor and well-balanced judgment which becomes the followers of Hippocrates. We will then merit and receive those monetary emoluments that flow from their administration which is our rightful heritage. Moreover, the members of our profession may thus increase their an-

nual income and what is more germane to the point, preserve leadership in these great social movements which represent nothing more than the natural by-products of our present highly competitive economic life, if forsooth they appear so capable of falling, lest we be alert, into the hands of those misguided legislators who embrace the principle of State Medicine as a cure for all the aforementioned problems. But to return to the matter as it relates to the question of disease prevention. The most effective medical teaching, could it be adequately distributed, issues from the services of the family physician who is first of all an apostle of medical instruction. But such general contact is notoriously lacking. Assuming that there are enough physicians to assure each unit of the population with needed care provided their distribution could be handled so as to cover rural needs and again confronted with the fact that with rare exceptions the most flagrant lack of such care occurs in centers of population where concentration is greatest, one is lead to look for the cause which furnished the paradox. The answer comes quickly. It returns to the cost of such care, cost which added to the necessities of life, not to mention the luxuries now happily in reach of the humblest citizen — outweighs the income of some 50 per cent of our people. According to the United States census of 1923, 50 per cent of the people admitted to general hospitals paid in full, 20 per cent paid in part, and 30 per cent paid nothing. This ratio would probably hold in 1929 and represents the pecuniary relation of patient to physician, which, interpreted, means that some 50 per cent of our population are unable to pay on the present basis of physician's charges.

What, then, is our answer to those who, claiming that we are sufficient in number for the task, intrusted with the necessary learning, licensed by the State and thus given priority and yet so lacking in the delivery of a service on terms suited to the consumers' purse? If we deny responsibility for the service to the whole people and impose the obligation upon the State, we are giving support to State Medicine. If we refer such a large block of our population to the clinics



of lay workers, moved by the spirit of philanthropy, we give comfort to those who would usurp the legitimate field of the physician. If we refuse to serve them when called albeit their lack of financial ability is known we are thought to be mercenary and to have lost the charm and distinction attached to the elders in our profession. Have we, then, no answer to such an indictment? We have, but society does not recognize it in the offspring of its own creation, the modern physician.

He is the product of the age in which he lives, and age not entirely of his making. Although giving complete and unqualified endorsement to the high standards of education required of him he faces life expensively educated, equipped and hedged about with a standard of life and overhead which he soon finds his income inadequate to meet. Moreover, to keep abreast a large share of his time must be given to study and to remain fit for the exacting duties of highly competitive practice, relaxation through recreation is essential. With his time thus encroached upon and with rigid standards ready made, he must of economic necessity give first choice to pay patients, to find too often that those able to employ are not sufficient to furnish an income commensurate with the type and cost of service given. These facts should go to the public in answer to those critics who, having greatly magnified our pecuniary rewards, ascribe to the modern physician a wholly mercenary motive. In other words, the physician, too, is affected by the new order and finds that his collections are hardly sufficient to maintain the elaborate set up laid upon him by a whimsical public, let alone the modest livelihood which none would deny him.

But are we entirely blameless? Have we in the face of changing conditions reset the order of our house, introduced business methods as a partner, and carefully studied the consumer field. Perhaps we might next identify our position as it now relates to the medicine of our day. As it presents itself to my mind, our profession is over traditionalized and is encumbered still by the top hat and Prince Albert coat. We have been so busy living up to our ideals, in maintaining

the letter of ethics, and in acquainting ourselves with the intricacies of our newer and ever widening instruments of precision, that we have not realized that we live in an economic age. We have lacked either the time or inclination or have wantonly failed to produce the leadership to show us that medicine must be so reorganized as to accommodate itself to an economic age and to cope with those problems involved in these newer services so closely related to our profession. If railways, vast manufacturing organizations, and other big business finds it necessary to reduce overhead charges by eliminating lost time through sickness and accident, why would the same principle be unethical if applied so as to lower our overhead. Group practice has been tried off and on for a number of years with indifferent success. It seems to me that the time has arrived when this form of practice should be widely extended and enthusiastically embraced.

The scope of this paper does not permit of a discussion of the question of ethics as applied to these problems. Suffice it to say, however, that ethical men can practice under these various heads, and if support for such a position is wanted you are referred to the interpretation of ethics, in this connection found in the report of the Judicial Council of the American Medical Association in the proceedings of the House of Delegates, Washington Session, May, 1927. Although personally of the opinion that organized medicine, as a means of self-preservation, should actively support the principle involved in all these closely related spheres of medical activity, I hasten to deny any intent to detract from the zeal which our profession shows toward strict maintenance of the ideals and ethics which sets it apart as a great service organization. Nor does adherence to them necessarily forsake these ideals. None would welcome the day that finds us reduced to the ranks of a trade, or fallen from the dignified position secured through the sacrificial services of our forefathers in medicine. I submit, however, that the enviable position enjoyed by our profession has been won and merited through the furnishing of an essential service to the public of the past and that an overzealous attitude toward the maintenance of

fundamentals in medicine, if it stands in the path of adaptation to present-day needs would be, not only visionless worship of tradition, but rank failure to appreciate that our future is no less dependent upon a maintenance of this vital function, to the public of our day. Then, wherein have we failed?

To furnish leadership both in medical legislation and in the devising of means and methods whereby our services may be evenly distributed to the public and at prices within the range of all groups. If there has been foisted upon us laws encroaching upon our particular field of service and in the framing of which we have had no voice, we can blame no one but ourselves. If it should appear that the means which society has, and is applying, in an effort to rectify some of the weak spots left vulnerable by us our redress in not to unsympathetic criticism, but to an earnest effort to discover the human need that has caused their birth and to offer through organized medicine a better remedy. It is a heroic dose, but perhaps a bit of therapy long overdue to contend that our future progress must lie along somewhat revolutionary lines. We have marvelously progressed and all the benefits from laboratories and from refinements in the art have been immediately passed on to the public. But our task is unfinished. There remains the proper interrelating of medical service to the new world being created for us by the exigencies of modern economics and particularly the adapting of our service to the purse of the great middle class whom the Lord must have loved because he made so many of them. Active medical leadership is needed to give at once protection to our legitimate field and to guarantee that service to all the people to which they are entitled by inalienable right, and lastly to provide through constituted medical authority, authorized to speak for us, an open forum through which by the substitution of co-operation for destructive criticism methods that are fair to all concerned may be developed and applied.

Lastly, may I suggest the scope and purpose of medicine's newest specialty, the Medicine and Surgery of Industry. This subject forces its problems on us as more and more

the activities of industry relate themselves to our nation's economic life. This branch concerns itself with the work energy of the laborer. It is within its scope to seek to preserve the work energy of the laborer and to improve its quality and effectiveness by teaching the observance of habits of sane living, the practice of good personal hygiene, the raising of the standard of physical endurance through the elimination of potential factors of disability and by the fitting of men to forms of employment suited to their capacities under wholesome work conditions. There should be added the teaching of methods of effective and safe application of work to the particular job, and its maintenance, through measures designed to constantly renew its available level. Proper rest, recreation, sleep, and a sound philosophy of life which calls for nothing more than a fair opportunity to attain to one's best in whatever line he may be employed, should be encouraged. Laborers must be taught to avoid accident both to themselves and to fellow employees. This specialty deals with the individual or group as a work energy unit. In contradistinction, public health deals with the family as a social unit. The field of service of the industrial physician is the factory or shop, or the public health physician the home or the school. There is need amongst us for clear delineation of the field of this new service which the exactions of our era have forced upon us. Having been launched in the outset to serve selfish interests and having hitherto concerned itself with the elimination or reduction of lost time from accident or illness to the end that the volume of products and its corollary net profits might thereby be augmented, the present task of industrial medicine, under the banner of organized medicine, should be to divest it of its selfish aspects and to clothe it with the human birth to serve the mutual need of both employer and employe and, since the whole public is more and more dependent for its well-being on industrial activity, one can no manitarian point of view. Begun to primarily benefit the employer, it must end the benefactor of the employe. Having had it long justified an attitude of apathy toward

its claims upon the thought of organized medicine. For this, then, as for the other problems suggested, ours is the task of marking their legitimate fields, of acquainting ourselves with their needs, of setting standards of medical training and ethics for their practice. There must be, through properly amplified curricula in medical schools, by post-graduate instruction, and by interchange of ideas in our various societies an informed personnel who will rise above the so-called industrial physician of the early period devoted as he was in large measure to the primary interest of the employer or insurance carrier. Thus envisioned, the new industrial physician will practice this special branch so as to accomplish the end contemplated in the outset, but through the primary betterment of the laborer to whose interests the factory or the shop should be wisely subordinated.

In conclusion, Emerson is credited with saying that when the Lord needed a man to initiate and carry through some needed reform he had but to exercise his creative genius and the task was in process of completion. The complexities of society in general, ruthless to the prerogatives held as enviable by professions, the trades and the individual alike, have demonstrated that the health of a single citizen neglected, soon becomes the business of the commonwealth.

It is trite but true that healthy people constitute the nation's greatest asset. Unnecessary illness and lost time from accident is the cancer which Industrial Medicine seeks to remove. Potential disability from latent physical defects is the precancerous state and must receive, with accident prevention, our optimum attention. Industrial insurance, compensation laws, clinics both institutional and private, contract practice and State Boards of Health along with group practice introduced by us, represent agencies called into being by the creative power of public opinion seeking to cure an existing ill. These agencies need the helpful service which we are most able to give that they and we may survive. They will because the principle on which they are founded has as its capstone the common good of all the people. We may, unfettered by the State, if we but exercise that

medical statesmanship which the changing order demands.

"New occasions teach new duties, time makes  
ancient good uncouth,

He must upward still and onward, who  
would keep abreast of truth.

Lo, before us gleam her campfires, we our-  
selves must pilgrims be,

Launch our Mayflower and steer boldly  
through the desperate winter sea,

Nor attempt the future's portals, with the  
past's blood rusty key."

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### PRENATAL CARE\*

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J. F. CRANE, M. D.

*Rome*

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The subject of prenatal care is one that in comparatively recent years has come to play an important part in the practice of obstetrics. The advantages are apparent when one considers the morbidity and mortality, both maternal and infant, of those cases where no care before hand has been given as compared with the reduction of morbidity and mortality of the cases placed under the physician's care and observation before time for confinement.

It is well for an expectant mother to present herself to her physician when she first learns that she is pregnant. One seldom sees a case of marked toxemia of pregnancy in the early stages of gestation, but among the advantages of early presentation is the possibility of detecting conditions that will imperil the mother before she has advanced very far in the course of gestation. For instance, possibly an Ectopic pregnancy may be found and one can readily see how an early diagnosis would be beneficial to the patient. Then again, after a thorough examination, occasionally certain physical defects are found which would contraindicate the patient's continuing with the pregnancy. And how much better it is to make such detection early so as to conserve the patient's strength and vitality!

While the advantage of early observation of the pregnant woman goes entirely to the mother, that in the latter stage is designed

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\*Read before the Seventh District Medical Society, Cartersville, Ga., April 2, 1930.



for both the mother and the unborn babe, for certainly any advantage or benefit rendered the mother will be shared by the babe. Any measure taken to afford the mother better health prior to the delivery, and a more normal and easier delivery will have its beneficial influence on the babe—giving it a better resistance and greater vitality, and producing less injury at time of birth. Consequently its chances of living and receiving a healthy start in life are enhanced.

The matter of conducting the prenatal care of a patient is quite simple, yet means so very much to the patient—more than the average patient realizes. As practiced by most Obstetrical Clinics, the patient has a complete history taken and physical examination made. Of course any defect found at that time should be corrected. Many Obstetricians and Obstetrical Clinics make a routine practice of having a Wassermann test made on each patient at her first visit and, where indicated, specific treatment is instituted. This measure alone has served to cause many women to carry her pregnancy to full term whereas, otherwise, the great probability is that it would have resulted in miscarriage or stillbirth. It is common knowledge that syphilis is the greatest cause for miscarriages and stillbirths. According to Dr. J. R. McCord, who has made extensive study of syphilis in pregnancy—especially among the negroes of Atlanta, the fetal mortality, i.e., stillbirths, has been greatly reduced in those cases having a positive Wassermann and who received antenatal antisyphilitic treatment. Many babes have been thus brought into the world with blood showing negative Wassermann reaction by mothers whose blood Wassermann was strongly positive before antiluetic treatment was given.

After a thorough examination is made, the patient is instructed to return each month for a check-up and to bring with her a specimen of her urine. She should return once a month till the seventh month and then every two weeks till the ninth, and during the last month she should be seen each week. It is during the third trimester or the last three months that she is most liable to have

difficulty. And as the time for delivery approaches the liability increases. Serious damage can develop in a few days' time and, where there is evidence of trouble brewing or toxemia developing, that patient should be given close attention.

At each visit the patient should be weighed, blood pressure taken, urinalysis made and all recorded so as to make a comparison with conditions existing at previous visits. A gain of eighteen pounds may be considered normal. All above eighteen pounds may be considered abnormal. The patient should be questioned as to headache, dizziness, feeling of faintness, visual disturbance, edema, kidney disturbance, nausea, vomiting and *bleeding*. One usually examines the patient while in a reclining position to determine in so far as possible the condition of the fetus—i.e., height of fundus, condition of fetal heart tones and their location, position of fetal presentation, vertex or breech, position of babe's back, etc. The measurements of the mother's pelvis should be taken in primiparae and at the first visit. Any distortion or deformity or abnormality thus detected would be of great value in determining the advisability or inadvisability of Caesarean Section or whether the patient should be allowed to deliver spontaneously.

We are all familiar with the premonition signs and symptoms of developing toxemias of pregnancy. The outstanding features, for which we should be constantly on the alert, are:—Edema, especially on the hands and face; headache; visual disturbance; spots before eye; skimmed or blurred vision; dizziness; feeling of faintness; increase of blood pressure; presence of albumen in urine; excessive gain in weight. When any of these symptoms develop the patient should be advised to follow a diet very low in proteins, practically salt free, and of low caloric value. She should have enforced rest, restricted fluids until edema subsides; diuretics and free elimination—especially with salines.

Ordinarily when a patient cooperates with her physician on these lines, the condition will subside or abate and no difficulty will be experienced. Where the condition does not

disappear, the patient should be nursed along and carried to as near term as possible and labor induced.

As intimated above, prenatal care is comparatively a new development in the art and practice of Obstetrics. The laity must be taught its advantages and it, of course, is incumbent upon the medical profession to carry the gospel to them. Already among the more enlightened, the reaction to this type of education is beginning to manifest itself by expectant mothers placing themselves early in pregnancy under the care of their physicians. How much better this is! Even the doctor is placed in a great deal more advantageous position, for he has had an opportunity of knowing ahead of time conditions he has to meet and naturally is in better position to render better and more efficient service to the patient.

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## SCLERODERMA

### *Insulin Therapy*

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#### *Case Report*

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ERNEST F. WAHL, M. D.

*Thomasville*

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Scleroderma may be defined as a nutritional disturbance leading to induration and atrophy of the skin and an increase in the fibrous elements of all the organs and tissues of the body.

The etiology of this disease is obscure. It occurs approximately twice as often in women as in men and most frequently between the ages of 30 and 50. Not infrequently a case is encountered in persons under 20 years of age and one case of congenital scleroderma has been recorded. Heredity does not seem to play a definite part. Infections have been considered important predisposing causes since cases have followed influenza, acute otitis media, diphtheria, pneumonia, typhoid fever, scarlet fever, erysipelas, tonsillitis, tuberculosis and syphilis. However, the cases following infection are usually more acute in onset and rapidly progressive in their course. Alcoholism is sometimes considered an important factor. Of the other etiological possibilities,

diseases of the blood vessels, due to vasomotor disturbances, and endocrinopathies have been given serious consideration. The glandular theory has come into prominence largely because of the pathological changes observed in the thyroid, pituitary, pancreas, adrenal, testes, ovary and parathyroid glands. It is also worth noting that some cases have improved when given thyroid extract. However, the observation has been made that this is not likely to occur unless the basal metabolism is below normal. One case developed in a myxedematus patient who was receiving thyroid extract at the time.

The pathological changes involve chiefly the connective tissue elements. The epidermis is usually normal except for an increase of pigment in the malpighian layer. In the corium is an increase of the collagenous intercellular substance with flattening of the papillae, compression of the cellular connective tissues and fragmentation of the elastic fibrils. The sweat glands and hair follicles may be compressed and atrophied. The peripheral nerves are usually normal, but sclerotic changes have been found in the spinal cord. There is a striking change in the blood vessels. The adventitia shows round cell infiltration, the media an increase of connective tissue, the fibers running parallel with the muscle fibers. The intima is thickened with narrowing of the lumen. Fibrous invasion of muscles, fascia, glands and other organs is the usual picture.

#### CASE REPORT

M. B., an ignorant colored woman of 32, was admitted to the John D. Archbold Memorial Hospital, May 15, 1929, complaining of pain in the chest and stiffness of the arms. The history was of no significance.

The patient had noticed a progressive loss of weight and weakness for the past year. About six months prior to admission to the hospital she noticed stiffness of the arms and knees, limitation of anteroposterior movements of the head, arthritic pains in the knees and ankles and swelling of the face. She did not remember distinctly when each of these appeared, but was fairly certain that they were present about Christmas, 1928. The loss of strength had been sufficient to cause her to stop work. Numerous areas of leucoderma had appeared over the body in the past two or three months. There had also been a considerable loss of hair during the previous six months and more

recently she had suffered from almost constant headache. Albumin had been found in the urine on numerous occasions. There was no history of vasomotor disturbances.

The patient was a thin, colored woman 32 years of age. The face was uniformly puffy, but did not present the characteristics of ordinary edema. Chronic bilateral otitis media was present. The tonsils were huge, irregular and filled with pus. The heart measured 3 x 11 cm. A faint systolic murmur was heard over the entire precordium. The sounds were loud and booming in character. B. P. 150/100 right and left. Inconstant crepitant rales were heard over the left supraspinous fossa. The edge of the liver could be felt 4 cm. below the right costal margin. The hair had almost entirely disappeared from the temporal regions and was unusually thin over the rest of the scalp. The skin and subcutaneous tissues of the entire body, especially of the arms and legs, were hard, dry, smooth, inelastic and brawny. The natural color of the skin was chocolate brown, but over the knuckles of both hands, the neck, around the ears, the upper and lower eyelids, each temporal region, zygomatic processes and internal maleoli were areas of leucoderma, varying in degree from snow white to light yellow. The mucous membranes were not pigmented. The mouth could be opened only about half way because of the stiffness of the soft structures of the face. The right elbow was limited to about 50 per cent of its normal range of motion by the stiffness of the structures on the flexor side of the arm. The legs had a normal range of motion in the various joints, but considerable force was necessary to overcome the resistance of the sclerotic tissues. Sclerodactylia was very marked, the terminal phalanges being very smooth and hard. The skin over the hands, arms, and shins could not be pinched up into folds. The nails showed atrophic changes. No vasomotor phenomena were noted.

Since the patient was first seen, the temperature ranged from 98 degrees in the morning to 100 degrees in the afternoon. During the third week of treatment an acute parotitis appeared on the right side. The temperature reached 103 degrees for one day, but the fever and swelling rapidly disappeared under cold applications.

A few small calcified spots in the right apex and right hilus area were seen in stereoscopic films of the chest. There were 3 degrees of free HCL and 20 degrees of combined acid in the gastric juice. There were numerous hookworm ova in the stools. Blood chemistry determinations revealed 8 mgm. of calcium per 100 c.c.; 33 mgm. of nonprotein nitrogen per 100 c.c.; 2 mgm. of uric acid per 100 c.c.; 585 mgm. of chlorides per 100 c.c. and 110 mgm. of sugar per 100 c.c. The basal metabolism was minus 3 per cent. The blood Wassermann was negative. There was a constant albuminuria, varying from 1 plus to 2 plus. The phthalein excretion was 50 per cent the first hour and 25 per cent the second hour

after intramuscular injection. The red blood cells numbered 3,690,000, the white blood cells 11,500, and the hemoglobin was 60 per cent. The differential count was 31 per cent lymphocytes, 60 per cent neutrophils, and 9 per cent eosinophiles. A sugar tolerance test was performed, using 1.75 gms. of glucose per kilo of body weight. The fasting blood sugar was 125 mgm. per 100 c.c. At the end of one hour and two hours after the administration of glucose the blood sugar was 150 mgm. per 100 c.c.; at the end of the third hour 135 mgm. per 100 c.c. After the third specimen was taken, the stomach was pumped and the contents contained about 6 gms. of glucose.

### SYMPTOMS

The symptoms vary according to the type of the disease which may be circumscribed or diffused. Either of these types may be atrophic, edematous or erythematous.

The atrophic type, which is the most common, begins with stiffness of the hands and perhaps slight arthritic pains. The stiffness gradually increases until within a few months there is noticeable involvement of the hands, arms, trunk, and face. The legs are usually the last part of the body involved, but occasionally may be the first. There is progressive thickening, hardening, smoothing and contraction of the skin. It is stretched very tightly over the underlying structures and cannot be pinched up in folds. At times the entire body is so involved that not one bit of the skin can be pinched up. This results in restriction of motion of the involved parts. Eventually the skin, subcutaneous and other tissues are involved to such a degree that the mouth can be opened only a fraction of a centimeter, the extremities are fixed and in general the patient resembles a wooden image.

The edematous form is often acute. Within a few weeks the arms and legs become markedly swollen, the face is distorted with loss of all expression. This form is often preceded by severe arthritic pains. The skin has an ivory hue, is extremely firm, does not pit on pressure and feels like frozen flesh or, in some instances, like a cadaver. After a few weeks or months the stage of atrophy sets in and the course then resembles the atrophic form. As the atrophy progresses pigmentation increases. Occasionally a localized edematous form occurs, the lesions somewhat resembling erythema nodosum.

At times the erythematous type cannot be differentiated from Raynaud's syndrome until sclerodactylia appears. Definite cases of scleroderma are recorded in which the picture was typically that of Raynaud's disease for years before any of the characteristics of scleroderma appeared. The early vasomotor disturbances of scleroderma are usually very painful. The picture is sometimes so confusing that it is impossible to determine whether Raynaud's disease actually exists and is followed by scleroderma or whether all of the changes are due to the latter condition.

Generalized atrophy is the end stage of all types of



scleroderma. The picture is a pitiful one. The nose is pinched, the lips thin, face small; the eyes are sunken, all expression is gone from the face; the mouth can scarcely be opened and sometimes the tongue and palate are so stiff that swallowing is almost impossible. The fingers are fixed in a semiflexed position. The back and neck are rigid, creating an impression of a living mummy.

There is usually some pigmentation relatively early in the disease. At first the skin has an ivory or light yellow appearance, but becomes progressively darker even to a mahogany hue. Scattered areas of leucoderma appear over the pigmented parts. At times calcified nodules are found in the skin. In advanced cases trophic ulcers may occur over the knuckles and joints. Alopecia is common. There may be atrophy of the bones, especially the terminal phalanges.

Progressive weakness, asthenia, and loss of weight are the most important constitutional symptoms. There is usually no fever or characteristic blood picture and the blood pressure is usually below normal.

The entire course may last only a few weeks, but cases frequently drag on for many years.

#### TREATMENT

Almost every form of vaccines, serums, and chemicals has been used in the treatment of this condition without beneficial effect. There is a tendency to remissions and perhaps some of the slight beneficial results obtained from the use of some measures may be explained in this way. Various forms of hydrotherapy and massage have been found to give some symptomatic relief. The iodides, salicylates and salol have been given without benefit. Glandular therapy has been used extensively throughout the world. There are scattered reports of beneficial results from thyroid extract, pituitary extract, ovarian substance, and epinephrine. Other reports show no results whatever from the administration of these substances or combination of various glandular products. The benefit from thyroid extract is usually obtained in those cases that have a low basal metabolism. Anti-syphilitic treatment has given good results in a few cases where syphilis was present, but it is rather doubtful if such cases should be classed as scleroderma in the usual sense of the term.

More recently insulin has been used in a series of cases by Continental investigators and has given surprising results. We know that insulin sometimes has a marked influence on the entire endocrine system. Just what this action is we do not know, but in some cases the administration has been of considerable value in amenorrhea and dysmenorrhea. At the present time no one is able to state the rationale of insulin therapy in scleroderma except that it is known to have a stimulating effect on various glands of internal secretion.

This patient was given 15 units of insulin before each meal while in the hospital and after returning home 5 units before each meal. It was considered unsafe to give large doses in her home because of the limited intelligence of the patient. Within two weeks

there was a general softening of the skin so that the hypodermic needle could be easily inserted. Prior to that time a 25-gauge hypodermic needle would bend almost to the breaking point when the insulin was administered. The face had lost almost all of the puffy appearance. After three months' treatment the patient stated that she felt stronger than at any time in the previous year and was able to do her housework. She had gained no weight, but the tissues of the body had softened to such an extent that she had free use of the arms and legs. All pain had disappeared from the joints.

The patient discontinued treatment for three months. When I saw her at the end of that time she presented the picture usually found in this disease when the end is near. The arms and legs were spastic and the elbows ulcerated. Because of the difficulty in opening the mouth as well as the lack of food, she had been given almost nothing to eat for many weeks. The temperature was 104 degrees and blood pressure 90/60. She died the following day.

The response of this patient to insulin therapy was much greater than in seven cases I have previously treated by other methods. If promising results can be obtained in a patient who lives under adverse conditions, equally good or better results may be expected in patients whose economic status enables them to follow the treatment more closely.

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#### PREVALENCE OF SYPHILIS IN APPARENTLY HEALTHY NEGROES IN MISSISSIPPI

The examination of 7,228 blood specimens from an unselected group of rural Mississippi negroes above the age of 9 years by complement fixation tests for syphilis showed positive reactions in 19.3 per cent of all males and in 18.0 per cent of all females examined. The rates of infection in the various age groups reach a maximum between the ages of 30 and 39 for both males and females. Paul S. Carley, New York, and O. C. Wenger, Hot Springs National Park, Ark. (*Jour. A. M. A.*, June 7, 1930), point out that the positive results probably represent less than the actual amount of syphilis in the group. The infection rates in this unselected group are roughly the same as those discovered at the United States Public Health Service Venereal Disease Clinic at Hot Springs, Ark., in a selected group who were seeking medical aid for previously diagnosed venereal diseases. These data suggest that, from a public health and economic point of view, syphilis is probably the major public health problem among rural Mississippi negroes today.

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"Medicine and civilization advance and regress together. The conditions essential to advance are intellectual courage and a true love for humanity."—Howard W. Haggard, M.D., *The Milwaukee Medical Times*, June, 1930.

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Proceedings of the eighty-first annual session are published on page 289.

## PERNICIOUS ANEMIA\*

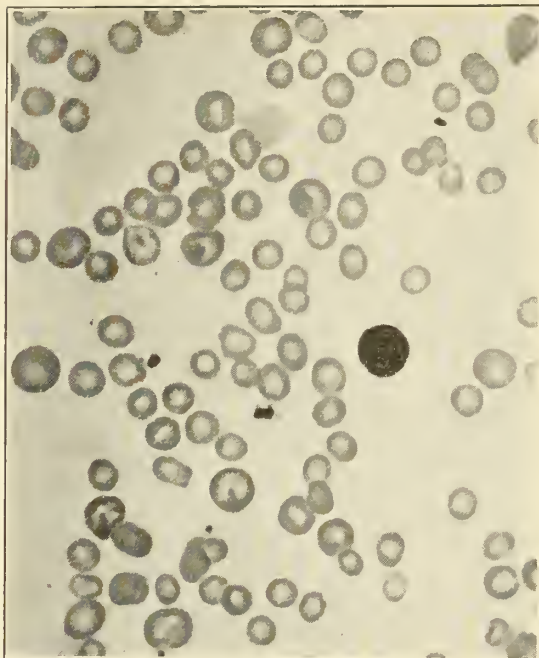
*Report of a Case in a Child of 8 Years.*WM. WILLIS ANDERSON, M.D.  
Atlanta

A congenital deaf mute, aged 8, who had been at the Georgia School for the Deaf at Cave Springs, for one year, was first seen on Nov. 22, 1928. She was admitted to Wesley Hospital for treatment of her extreme anemia. The patient's mother was dead and her father had deserted her, so the details of her family history and her past history could not be obtained. In the hospital at her school, she had spent three weeks taking treatment for malaria, on account of an enlarged spleen. She had lost much time from school. At intervals of two or three weeks she would have fever, lasting for several days, occasionally running as high as 104. On her admission to the Wesley Hospital, she was pale, undersized and underweight. A faint systolic murmur was heard over the heart, but there was no enlargement. The spleen was easily felt 3 c m. below the costal margin in the left mammary line; it was smooth and regular. The liver was felt 2 c m. below the costal margin in the right mammary line. The right epitrochlear gland was just palpable. Other than this, routine physical examination revealed nothing of note.

The Blood Wassermann reaction and urinalysis were negative and roentgenogram of her chest revealed nothing of importance. Some six or eight careful examinations of her stool showed no ova nor parasites. Numerous blood smears showed no evidence of malaria. Several blood cultures were done. Blood examination upon admission to the hospital was as follows: red blood cells, 3,760,000; leukocytes, 6,650; hemoglobin, 60 per cent; polymorphonuclears, 40 per cent; small lymphocytes, 36 per cent; large lymphocytes, 16 per cent; eosinophils, 4 per cent; transitionals, 4 per cent. On Dec. 5, 1928 her blood picture showed: red blood cells, 2,780,000; leukocytes, 5,450; hemoglobin, 64 per cent; polymorphonuclears, 60 per cent; small lymphocytes, 28 per cent; large lymphocytes, 12 per cent.

On her first visit she spent two weeks in the hospital. During this time her temperature ranged usually from normal to 100. On two occasions it was as high as 102. Her treatment consisted of general tonic measures: a balanced ration, sunshine and reduced iron; she was also given quinine. During this stay she was benefited little. She was returned to her school with instructions to carry out the general tonic measures with reference to her anemia.

Her condition failed to improve and she was readmitted to Wesley Hospital on Feb. 28, 1929. A note from the school authorities stated that she had been fed liver extract and had been given large doses of quinine, and that a stool examination by the State



Photomicrograph of stained blood smear, Feb. 28, 1929.

Health Department had been reported as positive for hookworm. On account of her condition, however, no treatment had been given. On admission, her chief complaints were nausea, vomiting, loss of appetite and a tendency to sleep almost continuously. The blood picture at this time showed: red blood cells, 1,940,000; leukocytes, 13,700; hemoglobin, 50 per cent; polymorphonuclears, 72 per cent; small lymphocytes, 20 per cent; large lymphocytes, 8 per cent. A stained smear, examined by Dr. Kracke, showed changes of a severe anemia. There were many nucleated red cells, much polychromatophilia, anisocytosis and poikilocytosis, with increased percentage of immature polymorphonucleated cells, all indicating a severe anemia with bone marrow degeneration. Blood Wassermann test and numerous stool examinations were negative.

In spite of the usual statements found in textbooks that pernicious anemia rarely or never occurs in children, she was treated for pernicious anemia. She received daily, 200 grams of cooked liver, with 120 grams of muscle meat, fruit, milk and a general balanced ration. Her anemia began to improve almost at once, showing the following results: On March 12, 1929: red cells 3,480,000; leukocytes, 9,300; hemoglobin, 60 per cent; polymorphonuclears, 34 per cent; small lymphocytes, 53 per cent; large lymphocytes, 9 per cent; eosinophils, 4 per cent. On March 19, 1929: red cells, 4,440,000; white cells, 7,950; hemoglobin, 80 per cent; polymorphonuclears, 41 per cent; small lymphocytes, 54 per cent; large lymphocytes, 5

\*Read before the Pediatric Section of the Fulton County Medical Society, Atlanta, Ga., Oct. 10, 1929.  
Department of Pediatrics, Wesley Memorial Hospital, Emory University, Ga.



per cent. On March 28, 1929: red cells, 4,400,000; white cells, 9,250; hemoglobin, 80 per cent; polymorphonuclears, 36 per cent; small lymphocytes, 57 per cent; large lymphocytes, 4 per cent; transitionals, 3 per cent.

In order to test this treatment, all other medication was discontinued. Her general condition improved rapidly. On March 7, 1929 she weighed 42 pounds, and on April 13, 1929 she weighed 56 pounds. After six weeks in the hospital she was returned to her school with instructions to take either liver or liver extract daily.

Although she has not reported for further examination, written reports from the Superintendent of her school state that she is in good condition after one year, and that she is doing good work in her school.

Date	RBC	WBC	Hemoglobin
Nov. 22, 1928	3,760,000	6,650	60 per ct. (Dare)
*Feb. 28, 1929	1,940,000	13,700	50 per ct. (Dare)
Mar. 12, 1929	3,480,000	9,300	60 per ct. (Dare)
Mar. 19, 1929	4,440,000	7,950	80 per ct. (Dare)
Mar. 28, 1929	4,400,000	9,250	80 per ct. (Dare)

\*Liver started this date.

#### Summary

An eight year old child with pernicious anemia is reported. After various other treatments, she responded well to liver and liver extract, and, according to reports from her, has remained in good condition for a year and a half. With more recent ideas of the treatment of pernicious anemia, it is possible that some of the other severe anemias of childhood may prove to be pernicious anemia.

754 Juniper St., N. E.

### MEDICAL ASSOCIATION OF GEORGIA

#### *Proceedings of the Eighty-First Annual Session*

FIRST DAY, WEDNESDAY, MAY 14, 1930

The first general meeting was called to order in the Palm Room of the Partridge Inn, Augusta, Ga., at 10:10 a.m. by the President, Dr. William R. Dancy, Savannah. *Invocation*—Dr. Joseph Akerman.

Our Father, we come into Thy presence this morning assembled to deliberate and exchange opinions upon the serious work of benefiting our fellow-man. We ask that all our efforts may be acceptable in Thy sight, through Jesus Christ, our Lord. Amen.

*Address of Welcome*—Dr. George A. Traylor, President, Richmond County Medical Society.

Mr. President, Members of the Medical Association of Georgia, Ladies and Gentlemen:

It is my privilege and pleasure to extend to you on behalf of the Richmond County Medical Society a cordial and sincere welcome to our city on this, the eighty-first annual session of the Medical Association of Georgia. Furthermore, I am deputized by our Mayor, the Honorable W. B. Bell, to present the kindly reception of our city as a whole. Surely an organization which has reached its eighty-first milestone in such robust health possesses a hardy constitution, and must have accomplished much for the good of mankind.

We have much in medical traditions in this, our Southland, to energize us for further efforts in research into unexplored fields. What we actually know is so small in comparison with what we should like to know. There is still much work to be done, and what more glorious can one possess than the will and ability for work and a fertile field in which to labor.

We trust your stay with us will be so enjoyable from the social standpoint and so profitable from the scientific that when the time comes for you to take your leave you will do so with regret.

Under the capable chairmanship of one of the past presidents of this Association and a noble, generous, and forbearing colleague, Dr. William A. Mulherin, a program of entertainment has been formulated which we hope will prove pleasing.

The local chapter of the Woman's Auxiliary, under the capable leadership of Mrs. W. W. Battey, Sr., has been of inestimable assistance in every way.

May we ask that you will feel free to call on the various committees and the Woman's Auxiliary for any assistance that you may need.

Again, our sincere welcome to our midst.

*Response to Address of Welcome*—Dr. M. A. Clark, Macon.

Mr. President, Gentlemen of the Medical Association of Georgia, Ladies and Gentlemen:

I read in the magazines that all Italy is busy preparing to celebrate the two thousandth anniversary of the birth of their poet, Virgil. There are those among us who remember in our student days how we were introduced to the Aeneid by "Cano arma et Virum Trojanum"—"I Sing of Arms." and "The Trojan Hero." It would inspire me this morning not to sing of arms, but to sing of Augusta and her medical heroes. But,



gentlemen, like Artemus Ward, "I am saddest when I sing and my hearers are sadder still," so I hesitate to sing, for I would not make you sad.

I count it a pleasure and a privilege to respond to the address of welcome. Everything seems auspicious for a successful meeting. As I glanced out of the window when I was coming over on the train I saw the moon and the face looked a little redder than usual, and as I looked again I saw the moon was full. As I rode out here from the station in a cab and saw your beautiful city, made more glorious by its halo, I was glad we were meeting in Augusta.

Memory takes me back to our first meeting here. Thirty-four years ago it was the pleasure of your speaker to attend the meeting in Augusta, held in the courthouse then. We have been here many times since then and we are always glad when we meet in Augusta.

Gentlemen of the Medical Association of Georgia, we should be glad to meet in Augusta again. We go home each time with an inspiration to study more and do more and be better physicians. Go back a little over one hundred years and recall what happened in Augusta. The germ of medical education was planted; not only planted, but fostered by those great men who lived to see it developed into an institution that you may well be proud of. As I think of that institution and remember what it has done and is doing I am almost sorry that I am not an alumnus.

Milton Antony, said to be the greatest man in medicine in his day, was the wise, far-sighted leader of this movement. Henry F. Campbell, given to you by Savannah, probably getting his inspiration there, for it was in that city one of the first medical societies in America was chartered, joined with Antony in this great work. In 1884 he was elected President of the American Medical Association, the only Georgian who has ever been President of that Association. Dugas was another distinguished teacher. He was one of the early members of this Association and three times President, the only man who has ever served as President more than once. The two Eves, the first, if he had remained here a little longer, would have been our second President of the American Medical Association. We must not overlook L. D. Ford, one of our charter members and the Association's first President. We are indebted to the distinguished dean of your University, Dr. W. H. Goodrich, who has written so well of the Centennial of the Medical Department of the University of Georgia. You

will enjoy this book and I commend it to you.

We learn that the first thought of our organization was in this city, though completed in Macon. Is that not an inspiration to us?

You know when the Greeks wished to commemorate the achievements of their great men they called it their "Apotheosis." Someone has said that the apotheosis is the greatest attribute man can give unto his fellowman. Truly we can make this the apotheosis of those medical men of Augusta.

Your greeting, your welcome, is dear to us. We are having a good time and we know we will continue to have a good time. Dr. Traylor said he hoped we would go home regretfully. I know, gentlemen, we shall do that. Your hospitality, your beautiful city, your welcome, all assure that.

I suppose it is in order to congratulate Augusta on its last census. I have not had a chance to ride around and see how you have grown, but we are all proud of your growth, happy to be with you and to have your hospitality.

In closing, I am reminded of those great men we were speaking of a little while ago. I recall that when two thousand years ago the Great Physician, the God-Man, tired of teaching and healing the multitude, took his three favorite disciples and went up into the mountains for a rest, and there they saw that splendid sight, the transfiguration. The leader of those men said, "Let us make a tabernacle for these men." It seems to me this morning that it would be fitting if we would first create a tabernacle in our hearts for the Great Physician and then for Antony, Campbell, and those other great men, and strive to follow in their footsteps and be glad always that we had this inspiration.

#### REPORT OF HOUSE OF DELEGATES

Secretary Bunce gave an abstracted report of the action of the House of Delegates at the two meetings held on May 13, 1930.

*The President:* Gentlemen, you have heard the report of the House of Delegates as read by our Secretary. What is your pleasure?

*Dr. R. L. Miller, Waynesboro:* I move that the report be adopted. Motion seconded and unanimously carried.

*The Secretary:* I am in receipt of a telegram from Dr. H. R. Slack, of LaGrange, accepting the appointment as delegate to the Pharmacopoeial Convention in Washington, D. C. This convention is held every ten years and this will make fifty years that Dr. Slack has served this Association as our rep-

representative. Dr. Slack states that he is sixty-eight, in splendid health, and hopes to attend another convention. We hope he will.

The tickets for the alumni dinners may be secured at the hotel desk and it is requested that you secure the tickets early so that they may know how many to prepare for.

All those who wish to show lantern slides please notify the Secretary so that we will have someone here to operate the lantern.

We urge that all members visit the exhibits, both the scientific and commercial, because what the commercial exhibitors pay for space helps to defray the expenses of our session.

*The President:* We are now ready to proceed with our scientific program and we ask your close attention to the essayists. Each essayist will have fifteen minutes to present his paper, but he cannot extend the paper into the five minutes allowed for closing the discussion. We welcome discussion and trust everyone who wishes to do so will discuss the papers, making his remarks concise.

#### SCIENTIFIC PROGRAM

The following papers were read as a Symposium on Malaria:

"Plasmochin in the Treatment of Malaria," by Dr. R. L. Miller, Waynesboro.

"Malaria Control," by Dr. J. A. Redfearn and Dr. Thomas H. Griffitts, Albany.

"The Treatment of Hemoglobinuric Fever; Case Report," by Dr. H. M. Tolleson, Smithville.

These three papers were discussed by Drs. Ernest F. Wahl, Thomasville; T. F. Abercrombie, Atlanta; S. H. Haddock, Millen; C. K. Sharp, Arlington; Mark S. Dougherty, Atlanta; Joseph D. Gray, Augusta, and in closing by Dr. Miller, Dr. Redfearn, and Dr. Tolleson.

*The President:* We have been very fortunate today in having Dr. Frank Howard Lahey, of Boston, consent to address us. Some of us know a great deal about Dr. Lahey, but Dr. Paullin thinks he knows more than anyone else and I will ask Dr. Paullin to introduce Dr. Lahey.

*Dr. J. E. Paullin, Atlanta:* In our formation of the Abner Wellborn Calhoun Lectureship it was not only our idea to honor this great man, but to bring before you at each annual session of this Association some man distinguished and outstanding in the work which he has accomplished along medical lines. It is a pleasure today to be able to present to you a man who has accomplished a great deal in the few years that he has lived. I say few because he is one of the younger men in the profession, and he

represents and stands for that in the profession which is ideal. He was in the army and served with an evacuation hospital abroad. He is professor of clinical surgery at Harvard University and a graduate of Harvard, and, although his home is in Massachusetts, we feel that he also belongs partly to us and that he has interests in the South since he has been to our Southland on other occasions. He is a member of the Southern Surgical Association and a man who is well qualified to come to us today as the head of the Lahey Clinic in Boston, where he has had a tremendous experience.

I was first impressed by Dr. Lahey several years ago at a meeting of the American Medical Association in Washington when he appeared to discuss a paper on hyperthyroidism in the medical section. His discussion was so eminently to the point and drove home such a lesson to my mind that I felt that no one could come before this Association and present us a lesson that would be of greater use than Dr. Lahey. It is, therefore, with a great deal of pleasure that I present the third of our "guest artists", in the words of Graham McNamee over the radio, who will speak to us on "Goiter", Dr. Lahey.

*Dr. Frank H. Lahey, Boston:* Mr. President, Members of the Medical Association of Georgia:

I am greatly honored by your invitation to address you. I am doubly honored by the very kind remarks of your President and Dr. Paullin. I only hope that I can talk to you on this subject so that in some measure I will deserve these extremely kind and, in my mind, perhaps not entirely deserved praises.

Dr. Lahey then delivered the Abner Wellborn Calhoun Lecture entitled "Goiter."

*The President:* On behalf of the Association I wish to thank Dr. Lahey for his address, which I know was greatly appreciated. I hope it will not be long before he will return and visit us again. We will now adjourn until the afternoon meeting.

Adjournment at 1:10 p.m. to reconvene at 2:30 p.m.

#### FIRST DAY—AFTERNOON

The Association reconvened and was called to order at 2:40 p.m. by the President, Dr. William R. Dancy, Savannah.

*The President:* Because the patients are waiting we will change the order of the program slightly and have the psychiatric clinic at this time so that the patients may be taken home. We will then listen to the two remaining papers on the morning program and



the rest of the afternoon program in regular order.

#### SCIENTIFIC PROGRAM

"Psychiatric Clinic," by Dr. R. L. Harris and Dr. M. D. Clayton of the Staff of the United States Veterans' Hospital No. 62, Augusta.

"Blood Chemistry and Internal Medicine—Its Aid in Diagnosis, Prognosis and Treatment," by T. L. Byrd, Atlanta. Discussed by Drs. J. E. Paullin, Atlanta; C. H. Richardson, Jr., Macon, and in closing by Dr. Byrd.

"Acute Poliomyelitis," by Dr. Harold I. Reynolds, Athens. Discussed by Drs. Chas. C. Hinton, Macon; Lewis M. Gaines, Atlanta; Theodore Toepel, Atlanta; Henry M. Michel, Augusta, and in closing by Dr. Reynolds.

At this point in the program Secretary Bunce called attention to the Alumni dinners and announced that there would be a meeting of all those interested in urology immediately following the close of the scientific program. He also stated that because the proposed meeting of the Eye, Ear, Nose, and Throat Club conflicted with the alumni dinners it had been decided that they would have luncheon together on Thursday.

The President extended the privilege of the floor for discussion or any other purpose to any fraternal delegates who were present, and the program was resumed.

"A Disorder of Constitution," informal clinic by Dr. William R. Houston, Augusta.

"Mastoidectomy—Blood Clot Closure," by Dr. T. E. Oertel, Augusta.

"Dermatological Cases," informal clinic by Dr. G. T. Bernard, Augusta.

"Acute Osteomyelitis—Orr's Treatment," informal clinic by Dr. Charles W. Crane, Augusta.

"Forceps Operations," informal clinic by Dr. A. J. Kilpatrick, Augusta.

"X-Ray Diagnosis," informal clinic by Dr. L. P. Holmes, Augusta.

As this concluded the program the meeting was declared adjourned at 5:40 to reconvene at 8:30 p.m.

#### FIRST DAY—EVENING

The Association reconvened and was called to order at 8:50 p.m. by the First Vice-President, Dr. C. H. Richardson, Jr., Macon.

Dr. Richardson: This is the occasion when the Medical Association of Georgia presents to its retiring president the "Badge of Service." It gives me great pleasure to introduce to you Dr. Eugene E. Murphey, of Augusta, who will make the presentation.

Dr. Eugene E. Murphey: Mr. Chairman, Honored Guests, Ladies and Gentlemen:

Once in every year the Medical Association of Georgia honors one of its members with the highest office within its gift—its Presidency. That may be offered for one or two or many various reasons. Sometimes we offer it for high achievement in scientific research, sometimes we offer it for service in the cause of organized medicine, sometimes we offer it for medicolegal ability, for services on the floor of our State Assembly in protecting the interests of the profession and of the public. Sometimes we offer it to a man because we think he is a type of that vanishing physician, the country doctor, who has served his county for thirty or forty years with unselfishness and devotion, year after year, decade after decade. Sometimes we offer it to a man because of high achievement who is so modest that we have to drag him out of his self-imposed obscurity and into the limelight, and say to him, "Sir, we wish to honor you." We have honored our present President, Dr. Dancy. I will leave it to you to determine for yourselves why he was honored. I will say this, however, and say it with frankness and happiness, that never has any incumbent of the office combined in his personality so many of the prerequisites for which we honor a man with the highest office within our bestowal.

Then, after a year, we call this man whom we have thus honored up in public; diffident, timid, shrinking though he be, a complete version of the modest wayside violet, but we drag the violet from its bed and say, "Here is our shrinking, wayside violet," and for him we do another thing, which we do for all our presidents. We will pin on him tonight a little badge which, on official occasions of this Association, he may not be without. The badge of pure gold symbolizes, if you please, the aims and intent of the Medical Association of Georgia. A tiny thing, unostentatious, because the modesty of the true doctor does not permit him to decorate himself with baubles and gewgaws—so small a thing that one can hardly see it—yet it bears the motto of our Association; it bears the insignia of our Association, two clasped hands—hands which every true physician extends to every brother in the profession, a symbol of the fellowship which exists and which we strive year after year to make a more real and lasting thing.

Dr. Dancy, to you, sir, we offer this little Badge of Service, carrying with it all that the words which I have said imply—gold for the heart of you and for the things you have done; insignificant in size for your



modesty, but enduring as gold endures. Because as the years go by when we throw our minds back, we may forget in what year you were President of the Medical Association of Georgia, but the service which you have rendered to organized medicine, to your State and to humanity will live long after your name and your offices have been forgotten. You have left a lasting impression, sir, upon medicine in Georgia, and we who know you and who love you tender you this highest token of our esteem. It means that you have served.

*President Dancy:* Dr. Murphey, Mr. Chairman, Guests, Members of the Medical Association of Georgia:

To me this is indeed a memorable occasion and one I can assure you that time will not erase. It is a splendid thing when a man's friends, when his co-workers and when his fellow members of a medical association such as the Medical Association of Georgia, gather on an occasion like this to do him honor. To commend him for his efforts if not for his results, for his intentions if not for his realities, and for his visions if not for his accomplishments. These stimulate an impulse arising from the innermost chambers of one's heart of hearts and soul of souls which seems to transmit the information that the honor is not deserved and that he was not fully capable of the task. You gave me a great work to do, and I gain some little solace when I review the work of the past year and realize that I have given to you my best, the sincerest intentions and the most earnest endeavors. If these have accomplished anything I hope that the membership at large will profit thereby.

It has been my observation, part of my philosophy of life, if you choose to term it such, that man magnifies, that man enlarges in his own opinion on his own work and own service, while his friends minimize his work and depreciate his efforts. Tonight it is quite difficult for me to mentally harmonize my own conclusions and those of the speaker, Dr. Murphey. This silver-tongued orator, influenced by the friendship of years, and with his proclivities for exaggeration when it comes to old comrades, has showered upon me words of praise and commendation and I fear that you have been misled. I can only reply in the words of Sir William Osler, "To have striven, to have made an effort, to have been true to certain ideals, this alone is worth the struggle."

It is with the greatest of pleasure and satisfaction that I accept tonight this emblem of pure gold, this Badge of Service, with all the good wishes that go with it, with the

love and affection it bears, and with the work that it represents. The personnel of the membership of the Medical Association of Georgia is without a peer. The best men of this grand old State are in its ranks, and it is a great satisfaction and a great honor for me to feel that I can number every one of you as my friend. The spirit of the Medical Association of Georgia, that of loyalty, cooperation, and fraternalism, may it live and abide with you forever. This is my particular message.

President Dancy then took the chair and introduced the first guest speaker of the evening.

*President Dancy:* Ladies and Gentlemen: We are honored tonight by the presence of two distinguished guests, who were invited by this Association to appear here tonight because of their distinctive accomplishments in the field of medicine. The first of these gentlemen has made his mark in the world. He is a well-known pathologist, having risen to the rank of Professor of Pathology in the Medical College of South Carolina. Only recently he has received a very distinctive compliment, that of having been elected to the Presidency of the Medical Association of South Carolina.

It gives me great pleasure to introduce to you Dr. Kenneth M. Lynch, of Charleston, South Carolina.

*Dr. Lynch:* Let me first make my very pleasurable acknowledgment of the honor which is mine on this occasion as the guest of this great branch of organized medicine of this country. Permit me to express to you, officially and personally, the felicitations of your neighbor, the South Carolina Medical Association. It is to me of appropriate significance that this meeting is occurring under the eaves of your own State Medical School, because it is one of my strongest impressions that State medical associations should have as one of their basic reasons for existence a virile interest in medical education and the support of its institutions.

Dr. Lynch then addressed the Association on "Education."

*President Dancy:* Gentlemen, we have listened to a very wonderful address and I am sure we are all very thankful to Dr. Lynch for his courtesy in coming here to talk to us.

The next speaker is a man who has gained eminence through his efforts for our profession. He is a man who is a wholehearted supporter of organized medicine and a well-known teacher. He has the distinction of being an Associate Professor of Medicine in the

University of Minnesota Medical School, and I am very happy to introduce to you Dr. Charles B. Wright, of Minneapolis, Minn.

Dr. Wright then addressed the Association on "Our Responsibility to the State."

At the close of the program a one-act skit was given by the "Little Theatre League of Augusta", followed by dancing.

THURSDAY, MAY 15, 1930

SECOND DAY—MORNING

The Association reconvened on Thursday morning, May 15, 1930, and was called to order by the Second Vice-President, Dr. Grady N. Coker, Canton.

#### SCIENTIFIC PROGRAM

"The Care of Eye Injuries from the Practitioner's Standpoint," by William O. Martin, Jr., Atlanta. Discussed by Drs. Thomas R. Gaines, Anderson, S. C. (Fraternal Delegate); George H. Lang, Savannah, and Chas. C. Hinton, Macon.

President Dancy arrived and took the chair.

"Vaso-Motor Rhinitis," by Arthur G. Fort, Atlanta. Discussed by Drs. George H. Lang, Savannah; Thomas R. Gaines, Anderson, S. C.; George H. Faggart, Savannah, and in closing by Dr. Fort.

"Keratosiis, Epithelioma or Skin Cancer," by J. G. Dean, Dawson. Discussed by Drs. Howard Hailey, Atlanta; Herbert Alden, Atlanta; J. W. Palmer, Ailey; Guy T. Bernard, Augusta; Stewart R. Roberts, Atlanta, and in closing by Dr. Dean.

At this point the First Vice-President, Dr. Charles H. Richardson, Jr., took the chair.

"Spinal Anesthesia," by R. M. Harbin, Jr., Rome. Discussed by Drs. A. A. Morrison, Savannah; George W. Fuller, Atlanta; E. H. Floyd, Atlanta; A. D. Little, Thomasville; A. J. Mooney, Statesboro; Lon W. Grove, Atlanta; Charles H. Richardson, Jr., Macon, and in closing by Dr. Harbin.

"Laws Governing the Healing Art in Georgia," by J. O. Elrod, Forsyth. Discussed by Drs. C. L. Ayers, Toccoa; Theodore Toepel, Atlanta; Charles C. Hinton, Macon, and in closing by Dr. Elrod.

Dr. Marion C. Pruitt, Atlanta, announced that the annual clinic week for Emory University Alumni would be June 9th to 13th, and that clinics of all sorts had been arranged for.

Chairman Richardson declared a recess of ten minutes and appointed Dr. William H. Myers, Savannah, and Dr. Henry M. Michel, Augusta, Sergeants-at-Arms to secure quiet during the reading of the President's address.

The Association was called to order at 12 noon by the First Vice-President, Dr. Charles H. Richardson, Jr., who then introduced the following Fraternal Delegates:

Dr. B. C. Bird, Montgomery, Ala.

Dr. Thomas R. Gaines, Anderson, S. C.

Dr. Henry Green, Dothan, Ala.

Dr. Green: I have lived within a short distance of Atlanta for thirty years and why I have never before attended the meeting of the Medical Association of Georgia I do not know, but I am delighted to bring to you now the greetings of our Association and to rub elbows with you.

Dr. William R. Dancy then delivered his Presidential address, entitled "A Man of Medicine."

The meeting adjourned at 1:20 p.m. to reconvene at 2:30 p.m.

SECOND DAY—AFTERNOON

The Association reconvened and was called to order at 2:45 p.m. by the President, Dr. William R. Dancy, Savannah.

#### SCIENTIFIC PROGRAM

The following papers were read as a Symposium on Diseases of Children:

"Health Habits for Children," by M. M. McCord, Rome.

"A Critical Period of Childhood," by Thomas Bolling Gay, Atlanta.

"Alimentary Anemia," by William Willis Anderson, Atlanta.

These three papers were discussed together by Drs. Linton Gerdine, Athens; A. J. Waring, Savannah; Joseph Yampolsky, Atlanta; George L. Echols, Milledgeville; William A. Mulherin, Augusta; Theodore Toepel, Atlanta; R. L. Miller, Waynesboro, and in closing by Dr. McCord, Dr. Gay, and Dr. Anderson.

President Dancy announced that on May 21, 1930, the Georgia Medical Society would entertain Dr. John B. Deaver, of Philadelphia, and extended an invitation to all members of the Medical Association of Georgia to attend this meeting, which would be followed by a banquet and entertainment.

He also expressed his gratification for the many complimentary remarks that had been made regarding Health Education Week, which had been inaugurated and carried on by the profession throughout the State, and stated that the Council had voted to continue the work.

"Chronic Cystic Mastitis," by Charles C. Harrold, Macon. Discussed by Dr. William H. Myers, Savannah, and in closing by Dr. Harrold.



"Surgical Treatment of Gastric and Duodenal Ulcer with Respect to the Pathology Demonstrated," by Lon W. Grove, Atlanta. Discussed by Drs. J. C. Patterson, Cuthbert; E. H. Greene, Atlanta; Charles H. Richardson, Jr., Macon; Henry Poor, Atlanta; William R. Dancy, Savannah; J. C. Bennett, Jeffersonville, and in closing by Dr. Grove.

"Suprapubic Prostatectomy," by Ernest Corn and L. W. Pierce, Macon. Discussed by Drs. Earl H. Floyd, Atlanta; Edgar G. Ballenger, Atlanta; W. L. Champion, Atlanta, and in closing by Dr. Corn.

"Diverticula of the Esophagus, Pulsion Type: Case Report," by H. H. McGee, Savannah. Discussed by Drs. Murdock Equen, Atlanta; Robert Drane, Savannah; Charles C. Hinton, Macon, and in closing by Dr. McGee.

The meeting was declared adjourned at 6:20 p.m. to reconvene at 9:00 a.m. Friday.

The annual banquets of the Woman's Auxiliary and of the Medical Association of Georgia were held on Thursday evening, followed by dancing at the Country Club.

FRIDAY, MAY 16, 1930

THIRD DAY—MORNING

The Association reconvened and was called to order at 9:00 a.m. by the President, Dr. William R. Dancy, Savannah.

The President announced that in order to complete the program the discussion would be confined to those formally placed on the program to lead the discussion.

Secretary Bunce read an abstract of the minutes of the last meeting of the House of Delegates, held on Thursday, May 15th.

On motion of Dr. L. M. Blackford, regularly seconded and carried, this report was adopted as read.

#### SCIENTIFIC PROGRAM

"Carcinoma of the Ureter," by John B. Cross, Atlanta. Discussed by Dr. Walter R. Holmes, Atlanta, and in closing by Dr. Cross.

"Accidental Separation of the Normally Implanted Placenta," by E. Carson Demmond, Savannah. Discussed by Dr. James R. McCord, Atlanta, and in closing by Dr. Demmond.

"Some Unusual Problems in Surgery of the Thyroid," by Charles E. Waits, Atlanta. Discussed by Drs. Julian Quattelbaum, Savannah; Frank K. Boland, Atlanta, and in closing by Dr. Waits.

"Endemic Typhus," by S. T. R. Revell, Louisville, Ga. (No discussion because those who had been appointed to lead the discussion were absent.)

"Tularemia," by S. E. Sanchez, Barwick. Discussed by Drs. E. C. Thrash, Atlanta; A. J. Mooney, Statesboro, and in closing by Dr. Sanchez.

"The Value of the Electrocardiograph to the General Clinician," by James A. Fountain, Macon. Discussed by Dr. J. George Bachmann, Emory University, and in closing by Dr. Fountain.

*The President:* The next paper on the program is that of Dr. Jack C. Norris, of Decatur. I understand that Dr. Norris is in Europe at this time. According to our Constitution and By-Laws this means that the first alternate essayist shall be given the floor. Our first alternate is Dr. Blackford and we will now listen to his paper.

"Nephrosis," by L. Minor Blackford, Atlanta. (No discussion.)

"Pulmonary Spirochetosis," by H. L. Livingston, Savannah. Discussed by Dr. Edson W. Glidden, Alto.

"Breast Cancer," by A. J. Ayers and W. F. Lake, Atlanta. (No discussion.)

"Angina Pectoris," by Charles C. Hinton, Macon. (No discussion.)

*The President:* Gentlemen, this concludes the scientific program and all the papers on our program, including the three alternates, have been read, an accomplishment which I think has not been attained in many years. It is now 11:53 and we will recess until the hour of noon, when the annual election will take place.

#### ELECTION OF OFFICERS

The Association was called to order promptly at 12 o'clock by President Dancy, who reviewed the provisions of the Constitution and By-Laws governing the election, and requested the Ex-Presidents in the audience to act as tellers.

The following officers were then ballotted upon and declared duly elected:

President-Elect—Dr. Arthur G. Fort, Atlanta.

First Vice-President—Dr. George A. Traylor, Augusta.

Second Vice-President—Dr. S. T. R. Revell, Louisville.

Secretary-Treasurer—Dr. Allen H. Bunce, Atlanta.

Delegates to A. M. A.—Dr. William H. Myers, Savannah, and Dr. E. C. Thrash, Atlanta. Alternates—Dr. William A. Mulherin, Augusta; Dr. C. W. Roberts, Atlanta, and Dr. C. K. Sharp, Arlington.

Councilors: First District—Dr. William H. Myers, Savannah; Second District—Dr. J. A. Redfearn, Albany; Third District—Dr. J. C. Patterson, Cuthbert; Fourth District—Dr. O. W. Roberts, Carrollton.



## SELECTION OF MEETING PLACE

An invitation was extended by Dr. James N. Brawner, on behalf of the Fulton County Medical Society, to meet in Atlanta in 1931. Dr. Brawner stated that the House of Delegates had already approved the acceptance of this invitation.

Upon motion of Dr. William H. Myers, regularly seconded and carried, this invitation was unanimously accepted.

## VOTE OF APPRECIATION

Dr. J. O. Elrod was granted the privilege of the floor and introduced the following resolution:

As the Medical Association of Georgia has had such a delightful time in Augusta, be it

RESOLVED: That it is our pleasure to extend our thanks and appreciation to the Richmond County Medical Society, the management of the Partridge Inn, the press of Augusta, the Woman's Auxiliary of the Richmond County Medical Society, the management of the Bon Air Vanderbilt Hotel and the George Walton Apartments, the U. S. Veterans' Hospital 62, the Little Theatre League, the Augusta Garden Club, the Blue Moon Tea Room, and the community in general.

We never come to Augusta without enjoying ourselves; it is one of the places where we always have a good time, and I move you, Mr. President, that we express our appreciation in the adoption of this resolution by a rising vote.

Motion seconded by Dr. M. M. Head and unanimously carried.

President Dancy announced that 504 had registered, this being the largest registration for a meeting in Augusta.

## INSTALLATION OF OFFICERS

President Dancy requested Dr. Sharp to escort President-Elect Moore to the platform.

Dr. Dancy: It gives me great pleasure to introduce Dr. Moore to this assemblage. He is to be our President during the coming year. He has always worked very hard for this Association and has behind him a wonderful record. No one doubts that the future of the Association is in splendid hands.

Dr. Moore: Dr. Dancy, Gentlemen of the Medical Association of Georgia, Ladies of the Woman's Auxiliary, and Guests: With this gavel comes the responsibility of the year's work. I appreciate the honor and the confidence you have bestowed. The splendid co-operation promised by my loyal friends over the State makes the task a pleasant one, and my only desire is to serve you in the best possible way. I wish to express my appre-

ciation particularly to the Woman's Auxiliary. You are our greatest asset.

Mr. McArthur introduced Mrs. Moore, and at the request of Dr. Dancy escorted her to the platform.

Dr. Dancy then introduced Secretary-Treasurer Allen H. Bunce, who had been elected to succeed himself.

Dr. Bunce: Gentlemen, I thank you from the bottom of my heart. I love the Medical Association of Georgia. I have tried to do my best and shall continue to do the best I know how for the welfare of our organization.

As neither of the Vice-Presidents was present at this time it was impossible to induct them into office.

President Moore: If there is nothing further to come before this meeting I hereby declare the Eighty-First Annual Session of the Medical Association of Georgia adjourned *sine die*.

ALLEN H. BUNCE, M. D.,  
Secretary-Treasurer.

## POTASSIUM THIOCYANATE IN TREATMENT OF PATIENTS WITH HYPERTENSION

Fifty-eight hypertensive patients were treated by M. H. Fineberg, Cleveland (*Jour. A. M. A.*, June 7, 1930), with sodium bromide and phenobarbital for a period of three months or more. Of these patients twenty-two, or 37 per cent, showed a sustained drop in the pressure of 30 mm. or more. All of these patients and many who did not show this drop in pressure were subjectively improved. Potassium thiocyanate in doses of  $1\frac{1}{2}$  grains three times a day failed to cause any drop in blood pressure. Of twenty-two patients who were given potassium thiocyanate in a dosage of approximately 5 grains three times a day, twelve, or 57 per cent, showed a fall in pressure of 30 mm. or more. The subjective improvement was greater when the sedatives were used, while the lowering of pressure was more marked with the use of potassium thiocyanate. As far as subjective improvement was concerned, it did not always parallel the objective improvement. Many of the patients asserted that they felt better while under the sedative treatment, in spite of the fact that their pressures were now lower than before. Many of the patients also complained of transient attacks of numbness and tingling paresthesias in the fingers when the administration of the drug was first started; but these usually disappeared spontaneously. Also a sudden drop in blood pressure was often accompanied by a feeling of weakness of varying degrees of intensity. No harmful effects were observed in any of the patients with a dosage of approximately 15 grains a day for periods of three months.

## THE DOCTOR

The first sought in trouble—the last remembered in prosperity.—Federation Bulletin, June, 1930.

**THE JOURNAL**

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

JULY, 1930

**HAVE FAITH IN YOUR COUNCIL OF PHARMACY**

The science of therapeutics has tried in vain to keep abreast of the progress achieved by other sciences relating to medicine. Experience has taught most of us the fallacy of the old opinion that once the diagnosis is established, the rest is easy. Experience should also have taught us that treatment is as much an art as it is a science. Drugs have steadily assumed less and less importance in the management of diseases. Nevertheless, the quantity and variety of therapeutic products brought to our attention today has increased most enormously. This might be interpreted as a stride forward in drug therapy, but probably it rather emphasizes the uselessness of most drug preparations.

Every doctor's mail is swollen painfully with literature concerning drugs—old and new. So voluminous is it that one scarce has the time to scan through it—certainly not to peruse all of it. Every doctor's time is more or less encroached upon by the efforts of an army of detail men to ballyhoo the products of their drug houses. Every doctor's office is bombarded with samples of all descriptions, which, if allowed to accumulate, would, with little exaggeration, completely fill a good-sized room of his suite in a year's time (with floor space at \$2.50 per square foot).

Quite naturally there is chaff amongst the wheat or, in this instance, a little wheat amongst the chaff. The usefulness of some of these medicines is already known, for we all are aware that certain drug firms manufacture products that are as excellent as we can wish for, generally speaking. The very preposterous trade-names of many of them should relegate them into immediate discard. Imagine the value in dollars of thrown-out samples of this and that! Yet there is still some of it that intrigues enough curiosity to

cause us to wonder if it might not help such and such a case more than the carefully written prescription already in use. (Perhaps because the label or a pamphlet says absolutely it will.)

We are loath to prescribe medicaments about which, clinically, we know nothing. We are aware that the advertised claims for most preparations are misleading. We are wont to practice better therapeutics, to keep up with newer and better remedies, if there are newer and better remedies. How are we to do it?

The answer is simple. Have faith in the Council on Pharmacy and Chemistry of the American Medical Association. This official separator of proprietary wheat from chaff, this able, earnest body of workers is toiling ceaselessly to keep us informed about what is good, what is bad, and what is indifferent, among the marketed remedies of today. Consult their year book, "New and Nonofficial Remedies." If not listed in this, write to the Council for information concerning any special drug or compound that attracts your attention. They will gladly tell you all about it. For betterment, even entertainment, read "Nostrums and Quackery." You will learn the truth about most of the samples that litter your office. Such a practice of finding out about drugs will deflate our gullibility and familiarize us with a larger store of really useful drugs. It will keep us therapeutically more erect.

VERNON E. POWELL, M.D.

**THE NEWLY CREATED NATIONAL INSTITUTE OF HEALTH**

The Hygienic Laboratory of the Public Health Service will hereafter be known as the National Health Institute, according to an act of Congress approved May 26, 1930, entitled "An act to establish and operate a National Institute of Health, to create a system of fellowships in said institute, and to authorize the Government to accept donations for use in ascertaining the cause, prevention, and cure of disease affecting human beings, and for other purposes."

An initial sum of \$750,000 was appropriated for additional buildings and equipment at the present Hygienic Laboratory of

the Public Health Service. Provision is made whereby permanent memorials may be established by donations of \$500,000 or over. Already the Chemical Foundation has announced a gift of \$100,000 and other gifts are anticipated.

Public health investigations by the Public Health Service were first authorized in 1901 and since that time a vast amount of work, particularly with reference to the communicable diseases, has been accomplished at the Hygienic Laboratory. With enlarged personnel and facilities the National Health Institute will be able to broaden its scope of usefulness by including a study of the degenerative diseases and many other problems pertaining to public health.

Senator Joseph E. Ransdell, of Louisiana, introduced the bill and was largely instrumental in securing its passage.

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### CHRONIC APPENDICITIS

During recent years a great deal of discussion has arisen among medical men as to the use of the term chronic appendicitis for a somewhat ambiguous group of abdominal disorders not related or similar to the typical, recurrent attacks of acute or subacute appendicitis in which the appendix is removed during the interval between attacks. Some men of high standing have gone so far as to say that no such condition exists, classifying the latter as recurrent acute appendicitis; these men are internists chiefly, who claim that the radiologist, the surgeon, and the pathologists are frequently over-anxious to aid each other by finding obscure evidence of infection, and that the real source of the trouble can be found by more careful examination. However, these men have not brought forth any tenable reason why the appendix, a vestigial structure, should not be subject to a low grade of mild infection, or explained the relief which so frequently follows removal of the appendix.

The chief difficulty seems to lie in describing a definite picture which will be satisfactory to all. The history should be of first importance. A recurring or constant feeling of uneasiness or discomfort in the lower right quadrant of the abdomen or

about the umbilicus is almost always present. This may be noticeable only when working or exercising or at intervals weeks apart and is frequently associated with nausea but not vomiting. Due perhaps to a reflex spasm of the pylorus with delayed emptying of the stomach, there is a "heavy feeling" in the epigastrium with annoying eructation of gas. Physical examination reveals little except some tenderness (frequently indefinite) in the right lower quadrant which is present with the muscles relaxed and contracted. There is no muscle spasm and the tenderness is not referred to other areas except in the abdomen itself. The radiologist is frequently of aid, when, in the face of otherwise negative gastro-intestinal findings, he finds localized tenderness over the appendix with inability to fill it normally. However, some confusion occurs here, for frequently the radiologist can find this evidence in a patient who has had no such complaints mentioned above.

The pathologist must form his opinion on evidence of infection seen in the gross and microscopic examinations. The presence of adhesions would seem to be indicative of previous trouble, but every surgeon has removed appendices bound down tightly that apparently have never caused symptoms. It is also true that the removal of apparently normal looking appendices is followed by a complete clinical cure, so it will always remain difficult to correlate the pathological and clinical findings in chronic appendicitis.

Let us keep an open mind in regard to the existence of this condition. A recent review of the records of 500 of these cases at the Cincinnati General Hospital showed that 75 per cent of the patients were cured and an additional 15 per cent definitely improved. The operation is a safe one, for there were no deaths in the series, so why deny our patients this opportunity of relief for an almost minor but nevertheless disabling complaint?

D. HENRY POER, M.D.

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The Southern Medical Association will hold its next annual session in Louisville, Ky., November 11-14, 1930.



DETROIT SESSION  
OF THE  
AMERICAN MEDICAL ASSOCIATION

The Eighty-First Annual Session of the American Medical Association was held in Detroit, Mich., June 23 to 27. More than 5,000 representative physicians from all parts of the United States and many foreign countries were present. Detroit, with ample hotel facilities at very reasonable rates; many moderate priced eating places; ample and fair taxicab service; the largest Masonic Temple in the world in which was housed all the sections, scientific and commercial exhibits and everything to make a perfect meeting place, and, last but not least, a most hospitable local profession; all these made the eighty-first session one of the most successful in the entire history of organized medicine in the United States.

The clinical lectures, demonstrations of biochemical methods, and demonstrations of fresh pathology by nationally known teachers were especially valuable from an educational standpoint. These alone were well worth a trip to Detroit. The section programs were up to their usual high standard of scientific efficiency.

A special feature of this session was the presence of the ex-Presidents of the Association at the dinner given the officers and delegates by the Michigan State Medical Association on Monday night and also at the general meeting on Tuesday night when they were presented with medals in honor of their service to the Association. Medals were presented to the following ex-Presidents by the Chairman of the Board of Trustees, Dr. Edward B. Heckel, of Pittsburgh:

Frank Billings	Hubert Work
William J. Mayo	George E. de Schweinitz
Charles H. Mayo	William Allen Pusey
Arthur Dean Bevan	William D. Haggard
Alexander Lambert	Wendell C. Phillips

Jabez North Jackson

Drs. W. W. Keen, Ray Lyman Wilbur, and W. S. Thayer were unable to be present.

Those participating in the scientific program from Georgia were:

Drs. Charles E. Downman and William A.

Smith, who read a paper on "Localizing Diagnosis in Brain Tumor: Phenomena That May Be Misleading" before the Section on Nervous Mental Diseases.

Drs. Jack W. Jones and Herbert S. Alden, who read a paper on "Mycetoma" before the Section on Dermatology and Syphilology.

Drs. Stewart R. Roberts and R. R. Kracke, who read a paper on "Agranulocytic Angina" before the Section on Practice of Medicine.

The Medical Association of Georgia was represented in the House of Delegates by Drs. E. C. Thrash, W. H. Myers, and O. H. Weaver, all of whom were present at every meeting of the House. Dr. Thrash was again appointed Chairman of the Reference Committee on Amendments to the Constitution and By-Laws. Dr. Allen H. Bunce served as a member of the Board of Trustees. Dr. F. G. Hodgson assisted with the Exhibit on Fractures.

Those registering from Georgia were:

Frank K. Boland, Atlanta  
Joe P. Bowdoin, Adairsville  
Allen H. Bunce, Atlanta  
Charles E. Dowman, Atlanta  
Robert Drane, Savannah  
Mary J. Erickson, Thomasville  
James K. Fancher, Atlanta  
James A. Fountain, Macon  
B. C. Hale, Rossville  
Henry P. Harrell, Augusta  
Walter B. Heller, Toccoa  
Fred G. Hodgson, Atlanta  
W. R. Houston, Augusta  
Jack W. Jones, Atlanta  
O. H. Matthews, Atlanta  
J. R. McCord, Atlanta  
H. L. Montfort, Dublin  
W. H. Myers, Savannah  
J. E. Paullin, Atlanta  
M. C. Pruitt, Atlanta  
C. W. Roberts, Atlanta  
M. Hines Roberts, Atlanta  
Stewart R. Roberts, Atlanta  
E. C. Thrash, Atlanta  
O. H. Weaver, Macon  
B. T. Wise, Plains

The following officers were elected for 1930-1931:

President-Elect — Edward Starr Judd, Rochester, Minn.

Vice-President—Louis J. Hirschman, Detroit, Mich.

Secretary—Olin West, Chicago, Ill.

Treasurer — Austin A. Hayden, Chicago, Ill.

Speaker of the House of Delegates—Friedrick C. Warnshuis, Grand Rapids, Mich.

Vice Speaker of the House of Delegates—Albert E. Bulson, Fort Wayne, Ind.

Board of Trustees—(Term expires 1931), Thomas S. Cullen, Baltimore, Md.; (term expires 1935), Joseph A. Pettit, Portland, Ore., and J. H. J. Upham, Columbus, Ohio.

Judicial Council—G. E. Follansbee, Cleveland, Ohio.

Council on Medical Education and Hospitals—Charles E. Humiston, Chicago, Ill.

Council on Scientific Assembly—Frank Smithies, Chicago, Ill.

Philadelphia, Pa., was selected as the meeting place for the next annual session.

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## UNDULANT FEVER

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### *Case Report*

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MAURICE L. B. CLARKE, M. D.  
*Atlanta*

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The increasing incidence of undulant fever prompts me to report an atypical case occurring in Atlanta.

A. C., white, male, age 14; a high school student, was taken ill on January 6, 1930. The patient had a history of Jacksonian epilepsy since infancy, probably due to a birth injury. The present illness began suddenly with pain in both eyes, severe frontal headache, and tenderness in the left flank. The temperature on that day was 103 F. I saw the case the following day when the temperature was 102.5 degree, pulse 100, and the above named symptoms predominant. Physical examination was quite negative except for an enlarged, tender spleen, the anterior border of which was palpable on deep inspiration about one-half inch below the costal margin and was smooth and regular. There were no pains in the joints. A tentative diagnosis of undulant fever was made on the basis of elimination, and the patient was taken to the Georgia Baptist Hospital by request of the Morris Hirsch Clinic.

The laboratory findings were as follows: The blood serum agglutination test for Bru-

cella abortus was positive, the titer being 1:40 and 1:80. The test for *Brucella melitensis* was omitted by the laboratory. Blood count: Leucocytes, 8,200; Small Mononuclear, 29 per cent; Large Mononuclear, 4 per cent; Polys, 67 per cent; Hemoglobin, 95 per cent; Erythrocytes, 4,910,000. Smear for Malaria, Negative. Urinalysis, Negative. Centrifuged Specimen, Negative.

The temperature, without treatment except for Luminal, gr. ss., t.i.d., descended to normal on the day following admission to the hospital, but on the following day rose to 102.5 degrees and on each succeeding day the temperature has been normal.

### *Discussion*

It is evident that this is a clinically mild case, and, although subject to recurrence, has every apparent prospect for an uneventful recovery. No treatment has been given other than a high calorie diet and rest in bed, with attention to the emunctories.

The fact that the laboratory confirmed the clinical diagnosis, made prior to admission to the hospital, convinces the writer that undulant fever should be thought of in the typhoid group of diagnostic possibilities. The symptoms of the disease usually conform to the general signs of an enteric fever, justifying its inclusion in this group.

724 Hurt Bldg.

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## POTASSIUM THIOCYANATE IN TREATMENT OF PATIENTS WITH HYPERTENSION

Fifty-eight hypertensive patients were treated by M. H. Fineberg, Cleveland (*Journal A. M. A.* June 7, 1930), with sodium bromide and phenobarital for a period of three months or more. Of these patients twenty-two, or 37 per cent, showed a sustained drop in the pressure of 30 mm. or more. All of these patients and many who did not show this drop in pressure were subjectively improved. Potassium thiocyanate in doses of 1½ grains three times a day failed to cause any drop in blood pressure. Of twenty-two patients who were given potassium thiocyanate in a dosage of approximately 5 grains three times a day, twelve, or 57 per cent, showed a fall in pressure of 30 mm. or more. The subjective improvement was greater when the sedatives were used, while the lowering of pressure was more marked with the use of potassium thiocyanate. As far as subjective improvement was concerned, it did not always parallel the objective improvement.

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The First District Medical Association will meet in the Hotel DeSoto, Savannah, July 29th.

The Eighth District Medical Society will meet at Washington, Wednesday, August 13th.

## GEORGIA STATE NURSES' ASSOCIATION

## Officers

*President:* Miss Lucia Massee, R. N.,  
Cuthbert, Ga.

*First Vice-President*

Miss Alice F. Stewart, R. N.,  
University Hospital, Augusta.

*Secretary*

Mrs. J. F. Hawthorne, R. N.,  
410 Arnold St., N. E., Atlanta.

*Second Vice-President*

Mrs. Mae M. Jones, R. N.,  
Georgia State Sanitarium, Milledgeville.

*Treasurer*

Miss Jane Van De Vrede, R. N.,  
131 Forrest Ave., N. E., Atlanta.

## COUNCILORS

Miss Annie Bess Feebeck, R. N.,  
Grady Memorial Hospital, Atlanta.

Miss Vera Mingledorff, R. N.,  
209½ West Duffy St., Savannah

Miss Margaret Dorn, R. N.,  
1117 Telfair St., Augusta.

Miss Hattie Wilder, R. N.,  
118 Stonewall Place, Macon.

## "THE BIENNIAL"

Expressing the opinion that it was "the best in years and managed perfectly", Georgia nurses returning from the "Biennial" were enthusiastic in their praise of the convention of the three National Nursing Organizations—the American Nurses Association, the National League of Nursing Education, and the National Organization for Public Health Nursing—held in Milwaukee, Wis., June 9-14, 1930.

About 4,000 nurses were in attendance—leaders in all branches of nursing from various parts of the country. One nurse, Mrs. Bertha Kerl Barrett, came all the way from Honolulu to attend the Biennial. She was the only delegate from Uncle Sam's tropical possessions.

Many interesting figures of the nursing world were present to participate in this convention, all welcomed to the "Badger State" by a cordiality expressed through Miss Cornelia Van Kooy, President of the Wisconsin State Association, and to Milwaukee by Miss Anna K. Rice, general chairman of the local Arrangements Committee, as well as by members of the numerous and very efficient subcommittees.

One of the special features of the convention, from a mechanical standpoint, was the Nurses' Directory. The alphabetical file of delegates and visitors was an invaluable aid and was constantly the center of attraction to nurses desiring to locate friends.

## MEMORIAL SERVICE FOR MISS CLAYTON

A memorial service for Miss S. Lillian Clayton, who died in Philadelphia on May 2nd after a brief illness, was held in St. Paul's Church Sunday evening preceding the opening of the convention. This service was conducted by the Rev. Holmes Whitmore, rector of St. Paul's, and was attended by hundreds of nurses who came in advance of the con-

vention to honor the beloved former President of the American Nurses Association.

A beautiful tribute was paid Miss Clayton by Miss Goodrich, dean of the Yale University School of Nursing, in her commemorative address given during this service.

The Walter Burns Saunders' medal, given annually to that nurse who has made to the profession or to the public some outstanding contribution either in personal service or in the discovery of some nursing technique, was posthumously awarded to Miss Clayton as superintendent of the Philadelphia General Hospital, and was received for the institution by Miss Constance White, president of the student council. The medal was presented by Dr. Joseph E. Doane, of Philadelphia, a long-time friend and co-worker of Miss Clayton, at a joint meeting of the three organizations the night of June 12th. The medal is engraved on the face with the head of Florence Nightingale, called the founder of nursing. On the reverse side is the lamp, symbolic of nursing, with the words—"Awarded to S. Lillian Clayton, Distinguished for Service in the Cause of Nursing."

## OPENING SESSION

Miss Elnora Thomson, First Vice-President and Acting President of the American Nurses Association since the death of Miss Clayton, presided over the joint opening session of the three organizations the evening of June 9th. In her message she predicted new ideals of nursing service and education, tracing the history of nursing from the early Christian era and showing how modern economics demand a close-knit organization to insure protection for both the patient and the nurse.

The visitors were welcomed by Mrs. Kohler, wife of the Hon. Walter J. Kohler, Governor of Wisconsin; by the Hon. Daniel Hoan, Mayor of Milwaukee, and by Miss



Van Kooy on behalf of the nurses of Wisconsin.

Dr. Glenn Frank, President of the University of Wisconsin, was the principal speaker at the opening meeting. His subject was "Durable Satisfaction of the Nurses' Career."

Three joint sessions were held on Tuesday, June 10th, the subjects discussed being "Legislation", "Nursing the Community", and "Medical Cost and Nurse Distribution." "Education" was the subject under discussion at another joint meeting on Thursday, June 12th.

All meetings were held in the city auditorium, an immense building, well arranged for conventions. Numerous auditoriums made it possible for section and committee meetings to be carried on simultaneously with business sessions of the three organizations, with practically no confusion whatever regarding time and place.

Miss Thomson presided over business sessions of the A. N. A.; Mrs. Anne L. Hansen, President, presided over those of the National Organization for Public Health Nursing, and Miss Elizabeth C. Burgess, President, over the meetings of the National League of Nursing Education.

Mrs. Emma A. Fox, called the "Mother" of the convention and "still young at 80", was again present to act as parliamentarian. Mrs. Fox, though not a nurse, "belongs."

#### HOSPITAL ADMINISTRATOR ADDRESSES NURSES

Robert E. Neff, Administrator, University Hospitals, University of Iowa, was one of the outstanding speakers during the convention. He predicted the functioning of schools of nursing on the same basis as schools for other professions and the assumption by the public of responsibility for nursing education. "If society wants good nursing service it must pay the cost of nursing education just as it does for educating physicians, lawyers, engineers, and other professional workers," said Mr. Neff, who showed that the cost to the hospital for training a nurse was about \$1,950, or an average of 35 cents an hour paid for her services while learning the profession. "It is not far fetched to prophesy that nursing is due for a rapid and inevitable change in its status before many years. Good nursing service is perhaps the best advertisement that a hospital may have, therefore efficient nursing care of patients is an assurance which every hospital constantly seeks." Mr. Neff advocates nursing being put on a strictly academic basis, with hospitals playing only a single part, instead of being both school and training ground, as at present.

#### "UNEMPLOYMENT AS IT AFFECTS THE NURSE"

Dr. May Ayres Burgess, director of the National Committee for Grading Nursing Schools, in a paper presented during the convention, suggested some radical changes in the matter of training women for the nursing profession. Her address was illustrated by a chart showing that *at the present rate at which nurses are turned out each year there will soon be a nurse for each family in this country*. At present there is a nurse for each 590 persons. In 1910 there was a nurse for every 1,117 persons.

Miss Janet M. Geister, director at headquarters of the American Nurses Association, described the unemployment situation of private duty nurses as acute. "Overproduction in number and an underproduction in nurses capable of meeting the vastly changed conditions of illness are leading to very unsatisfactory conditions. More of our nursing must be done by graduate, experienced nurses and not by student help," said Miss Geister.

Miss Elizabeth C. Burgess, President of the National League of Nursing Education, addressing a joint meeting of the three nursing organizations, made the statement that there is an oversupply of nurses in the cities, with many employed only intermittently. "It is the large schools, not the small ones, which are directly responsible for unemployment in private duty nursing," said Miss Burgess. "If overproduction is to be stopped, the big schools must stop enlarging." Hourly nursing was suggested as a partial relief of the unemployment prevailing among nurses—a plan which admits of a patient securing the services of a nurse for an hour or more a day, paying accordingly.

Miss Nina D. Gage, Executive Secretary of the National League of Nursing Education and ex-President of the I. C. N., made a plea to the public over the radio during the Biennial in Milwaukee, urging the community to concern itself with maintaining standards of the profession. She began her appeal with a description of nursing as done by untrained and unskilled women, before Florence Nightingale went to the Crimea, telling how, after witnessing the suffering of men sent to war, Miss Nightingale set about to provide nursing care of a really high order; of the immediate great reduction in the death rate in the hospital barracks in the Crimea, as a result of her effort, and indicating the importance of skilled nursing care. "This marked the beginning of the great profession organized to work with the doctor in the hospital and in the home. Principles and ideals laid down seventy years ago by Miss Nightingale are

being followed today in the education of the nurse. The development of training schools has been rapid. The first nurse to graduate in this country died only last April, yet we have over 200,000 practicing graduates in the United States today. Hospitals started schools in order to provide nursing service for their patients; as the number of hospitals grew, the number of training schools grew apace, representing a wide variety of training. Today there are more than 2,200 schools for nurses, in sharp contrast with the seventy-nine medical schools. There are far more nursing schools than we need and the result is the term graduate does not always mean the same thing. Some nursing schools are genuinely interested in graduating nurses who are trained to give the skilled and comfort care needed by patients; others apparently are interested only in the work the student nurse can give.

"The nursing profession has endeavored to protect the patient by working for nurse practice laws in every state. These have met with great opposition and represent only minimum standards. . . . The profession is interested not only with the quality of service it offers its patients, but with the cost of service. One of the expenses is nursing care, but the nurse is by no means a profiteer, her annual income at this time being only \$1,400. She nurses only an average of eight months in the year. The other four are spent in waiting, holding herself in readiness. During these four months her expenses go on, but her income ceases.

"How, then, can the cost of nursing be reduced? Some hospitals are trying to find the answer through what is called group nursing. Under this plan the hospital, not the patient, employs the nurse; the patient shares with one or several other patients, and the nurse works on an eight-and-a-half-hour shift, with two other nurses working as many hours. The cost of nursing is materially reduced under this plan, which is being tried out in many hospitals. The Mayo Brothers have had it in effect for eight years.

"The important thing is that for the man with the modest purse, the trend is toward reducing his nursing costs. Hospital and nursing administrators and doctors are giving this earnest thought. The aim of the profession of nursing is to make the term *graduate* mean skilled, safe, nursing care. It wants every one in need of nursing care to be provided in the quality and quantity required, at a price the average man can afford to pay."

Miss Gage was formerly dean of the Yale University School of Nursing — the first

woman dean ever appointed by Yale. She established a school of nursing in China twenty years ago, when there was but one native woman nurse in that whole country. When she left China there were 2,000 native nurses, and the work of her school was recognized by the Chinese Government with an official appropriation.

#### THE NURSE'S RESPONSIBILITY

Miss Anna C. Jamme, director of the headquarters of the California State Nurses Association, pointed out the part nurses must play in enforcing laws protecting the patient and the trained, legitimate nurse.

"There is a widespread impression that enforcement of the laws lies solely with the nurses' board of examiners; that the quality of nursing is dependent on the part played by this board, and that the goal of a nurse is to pass examinations. Such is not the case. Every nurse is a potential factor in law enforcement. The responsibility is upon her. We have had too much stress on the nursing examination and not enough on regulation and standardization of the nursing school."

#### RESPONSIBILITY OF THE REGISTRY

Registry problems were discussed at a round-table conference of this group, held in Plankinton Hall, the auditorium, on June 12th and presided over by Miss Jane Van De Vrede.

The discussion centered around "The Registry, the Nursing School, and the Private Duty Nurse", and E. I. Erickson, superintendent of the Augustana Hospital, Chicago, led out with "Hospital Relationships." Mr. Erickson urged the sponsoring by Registries of uniform regulations for graduate nursing service, to be approved by graduates and by hospitals.

He was followed by Miss Frances M. Heinrich, of Chicago, speaking from the standpoint of the private duty nurse. Miss Heinrich expressed herself as feeling the hospital does not do its full duty toward the nurse when it does not have a manual of regulations to hand her, which acquaints her at once with the facilities of the hospital and with the institution's general procedure.

"The Registry Executive Angle" was handled by Miss Mary Margaret Muckley, executive secretary of the Third district of the Minneapolis Nurses Association, and she stressed the need, as she sees it, for assumption of public interest and responsibility in the affairs of the private duty nurse in the conduct of the Registry.

Mrs. Lena Schmitt, of Detroit, also talked from the angle of the private duty nurse, making a plea for Registry assumption of re-



sponsibility for furnishing the nurse with information and assistance which will be of educational benefit to her, as is done by public health and other organizations wishing to stimulate their personnel to greater effort and usefulness. Also for the adoption of a definite plan by the Registries whereby remuneration to nurses will be made on the basis of merit rather than on the basis of time service.

"Administrative Policies and Registry Programs" was the subject of Miss Jeannette Hays, director of the District headquarters of the Milwaukee Association of Nurses, and Mrs. Lucy L. Van Frank discussed "Essential Record Forms in Registry Operation."

"Publicity Methods and Costs" and "Consideration of Suggested Registry Standards" were discussed, respectively, by Miss Emma L. Collins, of the Nurses' Official Registry of Brooklyn, N. Y., and by Miss Cassie Rogers, of New York City.

A resume of the Report of the Registry Study was given by Miss Ethel G. Swope, executive secretary of District 5, Los Angeles.

The conclusion of the round table was that study committees should be organized by state associations and districts, to make plans for bringing about some of these suggestions.

#### PUBLIC HEALTH NURSING

Mrs. Anne L. Hansen, President, presided over the business sessions of the National Organization for Public Health Nursing, and leading nurse directors of various public health nursing organizations over the country presided over section meetings and special sessions of this organization. A movement toward the amalgamation of the A. N. A. and the N. O. P. H. N. was advocated in a resolution presented by the latter during one of the joint sessions.

Miss Pearl McIver, director of public health nursing for the State Board of Health of Missouri, addressing a joint session of the three organizations, traced the history of present-day nursing in her paper on "Public Health Nursing Legislation." Miss McIver stated that forty states now have legislation which permits the employment of public health nurses by official agencies; twenty-three states permit rural administrative agencies to employ nurses for public health nursing work; fifteen have similar legislation for cities; twenty authorize the employment of school nurses; twelve definitely refer to tuberculosis work, and eight states have no legislation which explicitly pertains to public health work.

"Experience has taught us that permissive legislation is to be preferred to mandatory

laws when it concerns public health work," said Miss McIver. "We cannot legislate a health program on to a community. We must first create the desire for the program of service. Community progress never exceeds the progress made by the majority of citizens living in that community."

Dr. Michael M. Davis, of Chicago, talked to public health nurses on "The Cost of Medical Care", declaring that if the people of this country annually spent for public health nursing one-twelfth as much as they now spend for cigarettes, the health and happiness of millions of people would be literally transformed. "The public health nurse fights today in the front-line trench in the warfare against the two main forces which promote disease — microbes and ignorance," said Dr. Davis. "From the standpoint of the nurse, it is a paradox that a wage scale of \$7 a day, which patients complain is too expensive, usually means a yearly income of only \$1,200 or \$1,300 for her, since she cannot hope to be employed 365 days in the year." (Statistics compiled by the Grading Committee indicate an average of less than eight months a year.)

Dr. T. F. Murphy, chief statistician for vital statistics of the Census Bureau, Washington, D. C., speaking before the general session of the N. O. P. H. N., stressed the need of records of birth, marriage, and death, and said that it is the duty of a public health nurse to file such statistics that other people in future times may not be handicapped.

#### THE RED CROSS P. H. N. SERVICE

Miss I. Malinde Havey, National Director of the Red Cross Public Health Nursing Service, Washington, D. C., told of the one "black eye" which public health nurses of this country are trying to relieve—the lack of rural community nursing. "You see," said Miss Havey, "nurses, like many others, want to come to the city, and they will sit for weeks, unemployed, when there is a crying need in the rural communities. Mothers and babies in the rural districts have died for the want of instruction or care, or both. Prior to 1909 there were but two rural nurses in this country—one in North Carolina and the other in the New England States. In 1912 the Red Cross became interested. When war broke out there were about 100 rural nurses. Their activities were suspended during the war period, but following the armistice the Red Cross found itself with surplus funds and devoted them to the establishment of rural nursing. The first year after the war there were 1,200 nurses in that job; now we have some 2,500. Our ideal is one nurse for every 2,000 persons in cities, and



one for every 1,500 persons in rural districts. The American Red Cross will keep 'on the job' until this Utopia is reached. There are still 1,500 counties in the United States without any rural service, and there is not one single rural nurse in Nevada."

#### MENTAL HYGIENE SECTION

The Mental Hygiene Section of the A. N. A. furnished one of the interesting meetings of the Biennial. Miss Elnora E. Thomson presided, and some of the subjects treated were "The Nurse's Function in the Training and Guidance of Children", "Psychiatric Point of View", "The Functioning of a Mental Hygiene Program in a Visiting Nurse Association", "The General Hospital Teaches Mental Nursing", etc.

The Government was another colorful section meeting, presided over by Miss Elinor D. Gregg, Chairman. Miss Gregg is superintendent of nursing for the Indian Service, Washington, D. C.

"Indians, Trachoma, and Nurses" was the subject of a paper by Miss Grace Engelman, who is the special trachoma nurse on the Navajo Reservation, near the Canyon Duchelly, Arizona. She told of the work being done on the Reservation by the Government in the interest of the several hundred Indian children suffering from trachoma, an affliction peculiar to the Navajos, which in extreme cases results in blindness. "Uncle Sam looks after the educational as well as the medical and nursing welfare of these little wards," said Miss Engelman. Ten teachers, a physician, and a nurse are employed on the Reservation.

"Modern Methods With an Ancient Scourge" was presented most interestingly by Sister Martha Lawler, chief nurse of the Public Health Service, connected with the Leprosarium at Carvel, La. By lantern slides and clay models she illustrated very effectively the different types of leprosy and the methods used at the Leprosarium. She explained the method of transmission of leprosy and stated that in spite of the extreme infectiousness of certain types of the disease no sister had ever contracted it in all the history of their care of lepers.

"The Tropics and the Native Nurse" was discussed by Miss Frances Winkler, chief nurse of the United States Navy, and "Service Heroines" by Sayres L. Milliken, Captain Assistant Superintendent of the Army Service.

Other Government superintendents of Nursing Service taking part in this section meeting were Major Julia C. Stimson, of the Army Nurse Corps; Mrs. Mary A. Hickey

of the Veterans Bureau, and Miss Lucy Minnigerode of the Public Health Service.

#### THE PRIVATE DUTY SECTION

Miss Anna C. Gladwin, of Akron, Ohio, presided over the Private Duty Section meeting. Miss Helen Greaney, of Philadelphia, led in the discussion, "What the Private Duty Nurse Derives From Attending State Meetings," followed by Miss Olive Dedrich, of Cleveland, Ohio. "The Bureau of Nursing Service" was presented by Mrs. Marie K. Wulf, of San Francisco; Miss Rose K. Steinmetz, of Akron, leading in the discussion which followed. Other subjects discussed were "The Responsibility of the Private Duty Nurse to Her Organization" and "The Ideal Nurse."

#### THE LEGISLATIVE SECTION

The Chairman, Miss Josephine E. Thurlow, President of the Board of Nurse Examiners of Massachusetts, presided over the meeting of this section in Walker Hall, the auditorium, on the afternoon of June 10th. Miss Anna C. Jamme, of California, had charge of the program. Miss Mary M. Roberts, editor of the American Journal of Nursing, addressed the group on "The Effect of Grading Schools Upon the Accrediting of Schools." This subject was discussed by Miss Nina D. Gage, executive secretary of the N. L. O. N. E.

"Can the Examining Board Enforce What Is Not in the Law?" was the subject of a paper by Miss Mary E. Gladwin, of Akron, Ohio, and this was discussed by Miss Margaret Stoddard, superintendent of the Skiff Memorial Hospital, Newton, Iowa.

Miss Helen F. Hansen, of the Bureau of Registration of Nurses, California, and Miss Grace Watson, educational director of the Jersey City Hospital, New Jersey, discussed "The Use of the Objective Type in State Board Examinations."

In addition to section meetings there were round tables for office nurses and nurse anesthetists, for state association secretaries, etc.

#### MISS THOMSON ELECTED PRESIDENT

At the final business session of the A.N.A. on Friday, June 13th, Miss Elnora E. Thomson, of Portland, Ore., First Vice-President and Acting President since May, was elected to serve as President for the next two years. Other officers named were Miss Jane Van De Vrede, Atlanta, Ga., First Vice-President; Miss Mabel Dunlap, Moline, Ill., Second Vice-President; Miss Susan Francis, Philadelphia, was re-elected as Secretary, and Miss Jessie E. Catton, Boston, was re-elected as Treasurer. Major Julia B. Stimson, of Wash-

ington, D. C., and Miss Adda Eldredge, of Madison, Wis., were named directors.

Miss Sophie C. Nelson, of Boston, was chosen as President of the N. O. P. H. N. by that organization, and Miss Elizabeth C. Burgess, of New York, was re-elected as President of the National League of Nursing Education.

San Antonio, Texas, was selected for the 1932 Biennial.

The National League of Nursing Education will convene in Atlanta, Ga., in 1931.

#### DELEGATES FROM GEORGIA

Delegates from the Georgia State Nurses Association were Miss Lucia Massee, of Cuthbert, President of the G. S. N. A.; Miss Annie Bess Feebeck, Atlanta, a former President of the State Association; Mrs. Eva S. Tupman, President of the Georgia League of Nursing Education; Miss Jane Van De Vrede, Executive Secretary of the G. S. N. A.; Miss Jean Harrell, Miss Minnie B. Bass, Mrs. Sue Paille, Miss Nancy Jenkins, Miss Margaret Brooks, and Miss Sara Collins, all of Atlanta; Miss Vera Mingleдорff, Miss Martha Gatzka, and Miss I. M. Brinkman, of Savannah; Miss Margaret Dorn and Mrs. Olive Barbin, of Augusta; Miss Mattie Lou Banks, of Macon; Miss Johnnie Robinson, Milledgeville; Miss Shirley Hamrick, Cedartown; Miss Eva Chalkley, Miss Annie Keith, and Miss Dovie Houghton, Columbus.

Among the other Georgia nurses attending the convention were Miss Gertrude Shepard, of Athens; Miss Florida Graves, formerly of Atlanta, but now of Peoria, Ill.; Miss Isabel Battle, of Columbus, who came direct from Oak Park, Ill., and Miss A. E. Higginbotham, formerly of Atlanta, but now of Belmont, N. C.

#### "GEORGIA BREAKFAST"

Georgia nurses enjoyed, among other social affairs during the convention, a Georgia Breakfast, given at the Hotel Wisconsin on Wednesday morning, June 11th. Miss Lucia Massee, President of the State Association, presided, and a number of the officers of the national organizations were guests of the occasion. Souvenirs were beautifully bound copies of Harry Stillwell Edwards' "Aeneas Africanus", and the place cards were Georgia peaches.

#### COMMUNICATIONS HEALTH EDUCATION WEEK

To the Editor:

I have just noticed a blank you sent out some time ago to be filled out and sent in after the examinations of the school children, etc. As you were in Villa Rica and know how they did there, we did similar here and in all made approximately a thousand examinations.

There were three public meetings, with, I would guess, about five hundred average attendance.

Quite a number of the defects are being corrected and the parents seem surprised. As to the examinations in Carrollton we find that all the children which have no special defect are making excellent grades in school. To the contrary, we find, without exception, when very poor grades are made, the children have one or more physical defects.

Out of four hundred and ninety examinations we made in Carrollton, I want to give you a list of defects:

Tonsils .....	301
Adenoids .....	83
Eyes .....	46
Nose .....	34
Lungs .....	34
Mal-nutrition .....	85
Enlarged glands .....	80
Heart .....	8
Ears .....	38
Hookworm .....	25
Blood .....	2
Skin .....	18
Teeth .....	301

Of course, we know there are other things but we could not make very careful examinations for lack of time.

D. S. REESE, M.D.

Carrollton, Ga., June 23, 1930.

#### SURGEON GENERAL'S LIBRARY

To the Editor:

Many replies to my letter of inquiry dated May 6th have been received and over ninety per cent of the institutions and organizations addressed have expressed an earnest desire that the Index Catalogue of the Surgeon General's Library be continued, and state that its discontinuance would be a very serious blow to scientific medicine.

I therefore take pleasure in informing you that the Catalogue will be continued, a new series being started after the completion of the present or third series.

M. W. IRELAND, Major General,

The Surgeon General.

Washington, D. C.

June 19, 1930.

#### MALARIA CONTROL AND THE CRAWFORD W. LONG MEMORIAL PRIZE

To the Editor:

I received a letter yesterday from Dr. Dancy stating that the laws governing the essay for the Crawford W. Long Memorial Prize state that the author must be a member in good standing of the Medical Association and that the essay contain original thought. He further advised that Dr. Griffiths could not be considered at all under the ruling mentioned. I believe the paper both worthy and original, but since it is a joint paper I shall not submit it for consideration in my behalf.

A great many citizens in my community have expressed to me personally their gratification, assuring me that I had led a fight overcoming obstacles that they



believed insurmountable, thus making possible the beginning of malaria control on a county unit basis for the first time in the history of the United States. I believe that time will show that there is nothing of greater economic value that could be started at the present time. So much for the original work. On the other hand Dr. Griffiths has put to practical application what had been for a long time a dream or a vision which I had repeatedly expressed to local clubs and officials, finally taking it up with the Governor, the State Board of Health and in turn the United States Public Health Service Officials, thus getting the work started.

While I did not win the Crawford W. Long Memorial Prize, I still prize the fact that I stepped from the ranks of Dr. Cabot's class of 1926 in the room where Dr. Morton first administered ether anesthesia, a fact stated by Dr. Cabot, who gave Dr. Morton credit of being the first to do so. Upon request, Dr. Cabot kindly granted me permission to make the statement and I did so, calling the class' attention to the fact that Crawford W. Long four years previous to Morton's administration had used ether and that he stood in the Hall of Fame as one of Georgia's representatives because of the fact. It was difficult in a way to do, and yet I felt that I would be untrue to the Medical Association of Georgia not to step out of rank. Here stood doctors from every state in the Union, many of whom had never heard of Crawford W. Long, and did not take my word until they had gone to Boston Library and looked up the question. They spoke to me the next day and told me that I had brought out a fact that they had not known of before. The feeling of well being that comes as a result of a spontaneous response to duty suddenly confronted is sufficient prize. Assuring you that I appreciate very deeply your kindness in suggesting that I submit the paper for consideration.

J. A. REDFEARN, M.D.

Albany, Georgia.  
June 20, 1930.

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DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS  
*Division of Vital Statistics*  
WASHINGTON

*Summary of Provisional Birth, Death, and Infant Mortality Figures in the Birth Registration Area: 1929.*  
(Exclusive of Utah from which complete transcripts for 1929 have not been received.)

NOTE: The birth registration area in 1929 included all of the United States except South Dakota and Texas. Totals in this summary relate to the the birth registration area, exclusive of Nevada, New Mexico and Utah. Data for the first two of these States are given but they are omitted from the totals because they were not in the registration area in 1928.

Washington, D. C.—The Department of Commerce announces that in the birth registration area (exclusive of Nevada, New Mexico, and Utah) there were 2,142,-

124 live births in 1929, a decrease of 78,063 or 3.6 per cent from the number occurring in the same area in 1928. In all but 4 of the 43 States for which figures for the two years are shown in the following table, the number of births was smaller in 1929 than in 1928, the greatest decrease in number for any one State being in Pennsylvania, where 11,245 fewer births were reported. The State reporting the greatest percentage of decrease was Florida where the number of births was 9.8 per cent less than the previous year. The 4 States reporting an increased number of births in 1929 were Arizona, Michigan, Montana and Tennessee.

The number of deaths occurring in the birth registration area (exclusive of Nevada, New Mexico and Utah) was 1,356,882 which is almost identical with the number occurring in the same area in 1928. In 21 States fewer deaths were reported in 1929 than in 1928 while in 22 States more deaths occurred in the later year. The greatest decrease in number of deaths (2,407) is credited to Illinois.

The infant mortality rate for 1929 was 1.5 lower than the corresponding rate for 1928, these being 67.3 and 68.8, respectively. For the States that were in the area in both years, the highest rates were 133.3 for Arizona, 91.4 for Colorado, and 90.9 for South Carolina. The lowest rates (47.9 and 49.5) were attained by Oregon and Washington, respectively.

Infant mortality rates are shown for both years for 63 cities that had populations of 100,000 or more in 1920. For 39 of these cities the 1929 infant mortality rates were lower than those for the previous year. The highest rates were 98.1 for Nashville, 95.3 for Memphis, and 93.8 for Atlanta. The lowest rate (42.5) was attained by Portland, Oregon.

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COMMITTEE ON THE COST OF MEDICAL CARE

*To the Editor:*

Believing that doctors and nurses of your state will be interested in the status of the cost of illness survey in which they are taking part, I would like to let you know what progress is being made. It will interest you to learn that up to the present we have received about 2,500 completed family schedules from the states where the survey was first started.

We are glad to see that the great majority of diagnoses are checked by the physicians, and that the nurses have been diligent in recording minor illnesses. As you know, records of colds, immunizations, and school health examinations are as important for our study as information concerning major illnesses.

I feel confident that the quality of the schedules already received is an indication of the excellence of the entire group and that you will have reason to be proud of your contribution to this nation-wide survey.

MARGARET C. KLEM.

Washington, D. C.  
June 9, 1930.



## WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

President.....	Mrs. Chas. C. Harrold, Macon	Recording Sec.....	Mrs. J. Cox Wall,, Eastman
President-Elect.....	Mrs. Ralston Lattimore, Savannah	Cor. Sec.....	Mrs. Wm. R. Dancy, Savannah
First Vice-President.....	Mrs. S. T. R. Revell, Louisville	Treasurer.....	Mrs. Ben Bashinski, Macon
Second Vice-President.....	Mrs. W. W. Battey, Sr., Augusta	Parliamentarian.....	Mrs. A. H. Bunce, Atlanta
Third Vice-President.....	Mrs. J. E. Penland, Waycross	Editor.....	Mrs. C. W. Roberts, Atlanta

### THE PHYSICIAN'S WIFE\*

One of the first things any wife should learn is that whatever means her husband employs to earn a living can be aided largely by her in her social contacts and associations. This is true with the tradesman as well as with the professional man. The physician's wife, however, should learn immediately that her husband is not a tradesman; that the potential forces in him which mean success is ability and personality. He has nothing to sell other than service, and that service, based on ability and personality, enters largely into the lives of both husband and wife in the matter of social contacts, customs, and associations.

The wife of a physician naturally makes contacts aside from that made in company with her husband. His busy hours in his work gives her opportunities for the usual social side of life enjoyed by other women. A great many persons with whom she comes in contact will not be friends or patients of her husband. She should be of such nature and temperament that her intimate friends may or may not be patients of her husband, and her contacts should be so pleasant with everyone that it will reflect the dignity of his profession, and a social atmosphere lived between them at home. The wife of a physician should be democratic enough to have friends in all groups, but she should be diplomatic enough to know from which to choose for intimate social contact.

A physician's wife should encourage the acquaintance and friendship of the wives of other physicians in the community in which her husband is located, and, while there may be a recognized professional grouping of the physicians in the locality, she should not show any knowledge of such groupings in her contacts with the physicians or her other friends. A physician's wife can go a long ways to separate her husband from any factional groups by friendliness, cordiality, and an impartial social recognition of the physicians as well as members of his family in all of her associations.

The wife of a physician should be interested in her husband's patients and will, naturally, if interested in his work, have a knowledge in a general way of the patients he is treating, particularly in small cities. She should show concern over the condition of her husband's patients, but there is a well-defined difference between friendly concern and idle curiosity. She should know that people are very peculiar about their ailments, and, while the family physician enjoys the complete confidence and knows the secrets which are so sacred to both patient and physician, contact with her friends should impress them with interest of genuine friendship, but no knowledge or concern over the secrets which are confided only to her husband.

A physician's wife should not be a slave to his office or to his household, except in the assistance she can render him in making the home happy and cheerful upon all occasions, and sending him to his office in the knowledge of her personal interest in his work and an unfaltering confidence in his honesty and ability. She should make his home a place to which their friends will find a welcome and a cheerful atmosphere always in evidence. She should train herself to keep conversation away from his work. A great many people visiting in the physician's home have the thought that the host can best entertain them, and himself as well, by talking about his work. His wife can often be the bridge to carry them over to more enjoyable discourse.

The physician's wife who can do so should find some pleasant diversion in which her husband can participate. It may be in the form of some athletic sport in which they are thrown with a great many people, as observers only, or preferably something in which they can participate themselves and form friendships which would be both pleasant and profitable, as well as a relaxation and rest.

The physician's wife should acquaint herself with the community's charity, preferably through an organization which is active in its relief. Such acquaintance or knowledge

\*Read before the Sixth Annual Session of the Woman's Auxiliary, Augusta, Ga., May 14, 15, 16, 1930.

gives her greater sympathy for the work her husband so frequently has to do for which he is never paid. She will understand, then, what genuine joy comes to the physician in being able to render service to all classes alike, and particularly to the underprivileged with which every community has to deal.

The wife of a physician should be interested in the organizations which has to do with his work. Every community where there is a sufficient number of physicians should have a woman's auxiliary to her husband's medical organization. The work of such adjunct organizations is too well known to have notice in this paper. Suffice it to say it should deal with such problems as will assist the physician in his work and bring further dignity and honor to his profession.

Finally, the doctor's wife should realize her peculiar and intimate relationship to the community, and all of her social contacts should reflect the esteem in which both she and her husband should be held.

MRS. B. H. MINCHEW.

Waycross.

#### NEWS ITEMS

Dr. and Mrs. William R. Dancy, Savannah, attended the reunions of the Confederate Veterans and Sons of Confederate Veterans at Biloxi, Mississippi. Dr. Dancy was elected First Vice-Commander-in-Chief of the Sons of Confederate Veterans.

Dr. A. C. Shamblin, formerly of Rome, has removed to Cartersville. He has retired from general practice and will devote his entire time to public health work.

Dr. H. L. Akridge, Brunswick, Commissioner of Health for Glynn County, claims for Brooks County the second place in the list of counties in the United States to make routine physical examinations of school children compulsory. On account of this work it is stated that Brunswick has the lowest death rate among the major cities of the Atlantic Seaboard.

Dr. Joe P. Bowdoin, Deputy Commissioner of Health for the State, and Dr. Russell H. Oppenheimer, Dean of Emory University School of Medicine, delivered lectures before the colored doctors of the state in Atlanta during the annual session of the Georgia State Medical Association, June 16-20.

Members of the Georgia Healthcade were entertained at breakfast in Valdosta at the Georgia State Women's College on June 13th. Drs. Frank Bird, Gordon T. Crozier and Archie Griffin, all of Valdosta, together with other leading citizens, were impromptu speakers.

Hon. Doyle E. Carlton, Governor of Florida, called a meeting of physicians, scientists, health workers and sanitation experts which was held in Tallahassee on June 12th. The purpose of the meeting was to form a scientific program for disease control in Florida.

The Third District Medical Association met at Vienna on June 18th. The Association was the guest of and entertained by the Dooly County Medical Society. The scientific program was made up of the following titles for papers: Malarial Symposium—Findings in Eighty-Fourth Health Examinations, by Dr. Guy G. Lunsford, Cordele; Principles to be Applied in Disease Prevention, by Dr. J. D. Applewhite, Macon; Malaria, by Dr. Allen H. Bunce, Atlanta; Malaria from a State Wide Standpoint in Georgia, by Dr. T. F. Abercrombie, Commissioner of Health for Georgia; The Value of Pyelograms in Diagnosis—illustrated with lantern slides, by Dr. E. B. Anderson, Americus. Addresses by Dr. G. Y. Moore, President of the Association, and Dr. A. G. Fort, President-Elect of the Association.

Dr. F. Phinizy Calhoun, Atlanta, was elected President of the Alumni Association of the University of Georgia.

Dr. and Mrs. W. H. Garrison, Clarkesville, entertained the members of the Habersham County Medical Society and Woman's Auxiliary at their home on June 6th.

The Brooks County Board of Health entertained the members of the Georgia Healthcade in Quitman to "all Brooks County" dinner on June 12th.

Senator Ransdall, of Louisiana, with the assistance of the American Medical Association and the Public Health Association, has succeeded in securing an appropriation by Congress to establish a "National Institute of Health." He has been persistent in seeking an appropriation for a number of years. The act sets up a humanitarian institution. The Hygienic Laboratory is made the foundation of the new institution which is to be a cooperative scientific organization in which leading experts in every branch of science may be brought together and given an opportunity to work in unison. The treasury department, aside from appropriations made by Congress, is authorized to receive contributions from personal philanthropists.

The Richmond County Board of Commissioners has undertaken the drainage of about 5,000 acres of land in the eastern portion of the county. This is one of the largest drainage projects undertaken in the State in the fight against malaria.

The Sixth District Medical Society met at the Elder Hotel, Indian Springs, on June 25th. The following doctors were on the scientific program: Dr. Thomas Harrold, Macon, read a paper entitled "Injection Treatment of Varicose Veins"; Dr. I. H. Adams, Macon, "Bronchial Spirochetosis: Case Report"; Dr. H. C. Atkinson, Macon, "Chronic Kidney Disease, With Special Consideration of Nephrosis"; Dr. O. R. Thompson, Macon, "Fibromyoma Complicating Pregnancy and Labor, Case Report"; Dr. William C. Pumpelly, Macon, "Hypothyroidism, Case Report"; Dr. E. R. Anthony, Sr., Griffin, "A Plea for Tuberculosis Camp." Addresses by Dr. M. M.



Head, Councilor for the Sixth District; Dr. A. G. Fort, President-Elect, and Dr. G. Y. Moore, President.

Dr. N. S. Davis III, Secretary, Chicago Medical Society, 185 North Wabash Avenue, Chicago, will be glad to mail copies of program for the society's summer clinics to be held at the Cook County Hospital, August 18th to 22nd, inclusive, to any one on request.

The New York State Department of Health through its Health News Service sent out a bulletin by Mr. R. B. Rickards, Director of the Division of Public Health Education, entitled "Crashing the Health Gate," part of which reads as follows: "Crashing the gate is a pastime indulged in by people who want to attend certain social, athletic, or other social functions, and lack the necessary cash, invitations or tickets to do so in a legitimate manner. Sometimes it is accomplished by force of numbers; frequently by misrepresentation and occasionally by stealth, but there is always the danger that the gate crasher may find himself unceremoniously evicted and suffer embarrassment or even personal injury thereby. Crashing the health gate is also a past time of a great many people, both young and old. The usual incentive in this instance is to increase the hours of leisure by stealing from the hours of sleep; or it may be to increase the income by extra work. Whatever the reason, a heavy strain is put on the human mechanism. As in actual gate crashing, it is fairly easy to 'get by' for the time being for Dame Nature frequently seems to be a sleep at her post. But sure as death and taxes the crasher of the health gate sooner or later is made to pay and nearly always in bodily injury of one kind or another."

The Fulton County Medical Society met at the Academy of Medicine, 38 Prescott Street, N. E., Atlanta, on June 19th. The following doctors were on the scientific program: Dr. Thos. Bolling Gay, Atlanta, gave a clinic, Sclerema; Drs. E. A. Bancker, Jr. and Earl Floyd, Atlanta, gave a case report, Polycystic Kidney Disease—illustrated with lantern slides; Dr. Lon Grove, Atlanta, gave a clinical talk on Carcinoma of the Rectum with report of a case; Dr. W. W. Young, Atlanta, read a paper entitled Frequent Errors in Attitudes Toward the Psychoneuroses.

Dr. S. H. Haddock, formerly of Millen and Commissioner of Health for Jenkins County, has removed to Augusta and accepted a position on the house staff of the University Hospital.

The Randolph County Medical Society held its monthly meeting in the Woman's Club Room. Cuthbert, on July 3rd. Dr. Thos. H. Griffiths of the U. S. Public Health Service, stationed at Albany, gave an address entitled "Malaria," illustrated with motion pictures.

The alumni and students of the Wesley Memorial Hospital, Emory University, gave an informal reception in honor of Miss Minnie B. Bass on Monday evening, June 30th.

The Atlanta Urological Society published the first issue of the Special Bulletin of the Society on May 29th. This number contains a sketch of the organization and history of the American Urological Society, the Atlanta Urological Society and the Georgia Urological Association. Dr. Allen F. Caldwell, Atlanta, is Editor.

Dr. J. Walter McMahan, formerly of Sevierville, Tennessee, has moved to Alma and engaged in the practice of medicine.

Dr. Cleveland Thompson, Millen, was recently appointed trustee of the Medical Department of the University of Georgia, Augusta.

The Association for the Study of Internal Secretions held its thirteenth annual scientific session in Detroit, June 23-24.

Dr. T. H. Johnson, Athens, and Dr. Thos. H. Griffiths, Albany, were given honorary degrees of Doctor of Public Health by the University of Georgia Medical Department, Augusta, for their outstanding records as public health officials.

The Twelfth District Medical Society met in the Frances Omberg Hotel, Vidalia, on July 2nd. The scientific program was made up of the following titles for papers: Georgia Medicine, by Dr. G. Y. Moore, Cuthbert, President of the Association; Diagnosis and Treatment of Thyroid Disease, illustrated with motion picture of operation, by Dr. W. A. Coleman, Eastman; Goiter, by Dr. B. H. Clifton, Atlanta; Where Are Free Clinics Leading Us, by A. G. Fort, Atlanta, President-Elect of the Association; Circulatory Failure, by Dr. Jno. W. Daniel, Savannah; Some Aspects of Prostatic Hypertrophy, by Dr. Cleveland Thompson, Millen; Diagnosis of Thyroid Conditions and Treatment, by Dr. Julian K. Quattlebaum, Savannah.

At a recent meeting in Washington and Baltimore, Dr. Charles E. Dowman, Atlanta, was elected President of the Society of Neurological Surgeons. This organization is composed of about twenty-five nationally known neurological surgeons.

#### MEDICAL PROFESSION AND PATERNALISTIC TENDENCIES OF TIMES

William Gerry Morgan, Washington, D. C. (*Jour. A. M. A.*, June 28, 1930), discusses the growth, decline, and reincarnation of paternalism in government; paternalism in medicine; voluntary sickness insurance; compulsory sickness insurance; state medicine; the public health movement, and nongovernmental paternalistic tendencies. He calls attention to these matters with a desire to arouse the individual members of the profession to a sense of responsibility in the concerted effort being made to forestall further encroachments on prerogatives which, by virtue of training and experience, belong to physicians as private citizens, members of an honored and honorable profession, whose duty is to the community they serve in their endeavor to prevent and to cure disease.



# BOOK REVIEWS AND ABSTRACTS

## BOOK REVIEWS

*Diseases of Children*, by Sir Archibald E. Garrod, the late Frederick E. Batten, Hugh Thurshfield, Donald Paterson. Second Edition, 1929, William Wood & Co., New York. 1,065 pages. Price, \$13.00.

Appearing first in 1913 this book has been brought up to date still retaining "its perfect form and graphic language." It is really a one volume system in that each section is written by a specialist in the field and is of sufficient length to permit ample detail. The list of the thirty-seven contributors contains the names of many distinguished English physicians. The editing has been ably done by Dr. Hugh Thurshfield and Dr. Donald Paterson. Dr. Thurshfield will be remembered as one of the guest speakers at the Interstate Medical Congress held in Atlanta in the fall of 1928. Clinical acumen has long been the hall-mark of British medicine, and is prominent on every page of the book. The descriptions are accurate, often epigrammatic and always concise, so that one acquires a vivid picture of the disease under discussion. In addition there is a very practical attitude regarding treatment. The therapeutic directions are definite and of sufficient detail. The very arrangement of the sick room has been elevated to a fine art.

Oddly enough heredity is the opening topic. In the text book by Holt and Howland heredity is disposed of as being beyond the control of the pediatrician. It is, however, not beyond his interest. The principles of this fundamental subject are lucidly set forth with illustrations of human cases from Nature's own experiments. This is followed by a resume of bacteriology and immunology. The other chapters are on the subjects familiar in text books. The section on neurology which will be of interest to internist and surgeon alike is excellent and the particular triumph of the book. The mysteries of Dermatology are quite well handled, and practical remedies suggested. Diseases of the eye are more fully treated than in most books.

Writers are sometimes guilty of what Sir Arthur Quiller-Couch decried as "journalism." The chapter on the feeding of infants and children to American eyes seems open to this criticism. The infant's nourishment is constantly referred to as "feed," replacing the more usual "feeding." This finds picturesque association in the following: "Immediately after the feed the child should be held up until he breaks his wind twice." This is more reminiscent of Sarah Gamp than of the Royal Society. This advice to remove the air bubble from the stomach for all its ruggedness is thoroughly sound.

The nutritional disorders of infancy are perhaps obscure to many. The condition known as atrophy, marasmus or athrepsia is mysterious to all. This condition has been so divided, subdivided and classified by the German pediatricians that the reader is lost in a maze of words. American thought on the subject has been somewhat obscured by lactic acid milk and

mastoidectomy. Leonard Parsons in discussing this subject accomplishes a practical adaptation of the German classification. The intraperitoneal injection of salt solution is discarded as dangerous. This procedure was introduced in America by the late Dr. John Howland of Baltimore, who first saw it used in England in the clinic of Dr. Garrod. Since its safety has been amply demonstrated and because of the historical association with the senior author of this book it deserves better mention.

The chapter on functional diseases of the nervous system, by H. C. Cameron, deserves special mention. This beautifully written section discusses those vexatious problems of behavior and management which he says "concern at once the physician and the priest, the pedagogue and parent." These symptoms of functional disorder are too often dismissed as results of the child's "natural" perversity or malice. Dr. Cameron develops a sympathetic point of view and his advice on treatment is sane. He emphasizes the important role played by management and environment in the development of these disorders. For the nervous child he recommends extra calories in the form of dextrose, plenty of rest and the regulation of his daily life.

For its collection of photographs alone the book would be a valuable acquisition. The subjects are posed to clearly show the abnormality in question. For example a baby with pyloric stenosis is so skillfully illuminated that the hour glass contraction of the stomach is very sharply visualized. Some of the endocrine disorders are well illustrated. Often the photograph of patient will be accompanied by one of the specimen removed at autopsy.

On the whole this is an excellent book and one that would be valuable not only to pediatricians but to any one who is called upon to treat children.

WM. H. KISER, JR., M.D.

*Gynecologic Technic*, by Thomas H. Cherry, M.D., F. A. C. S., Professor of Gynecology, New York Post Graduate Medical School and Hospital; Director of Gynecology; Pan-American Hospital, New York City, etc.

Dr. Cherry has written a very clear and concise book on the technic of the more practical procedures in Gynecology. He has confined his description of operations to one standard method. The method of choice in each operation is profusely illustrated allowing rapid digestion of its content. The book is written primarily for the general practitioner, but it will serve admirably as a ready reference book for the Gynecologist. Because of its brevity it is not recommended as a text book for the undergraduate.

LEWIS M. SMITH, M.D.

*A Text Book on Orthopedic Surgery*, by Willis C. Campbell, M.D., F.A.C.S., Memphis, Tenn. Prof. of Orth. Surg., University of Tennessee, College of Medicine, 705 pages. Price, \$8.50. W. B. Saunders Co., 1930.

In one concise treatise the author has attempted to cover the whole field of orthopedic surgery. In order to accomplish this end it has necessitated rather brief discussion of a great many conditions. The book is of great practical value to students, men in general work, as well as orthopedists, because it reflects the practical experiences that the author has had in his own very successful clinic. As the author states in the preface, "no attempt has been made to describe all known methods of treatment, but only those which, in the judgment and experience of the author, are considered to be of practical value."

The book is excellently illustrated, containing over five hundred cuts, mainly photographs and X-ray reproductions.

It starts out with a classification of orthopedic affections as follows:

1. Affections of Joints.
2. Affections of Bone.
3. Affections of Soft Tissues.
4. Affections of the Nervous System.
5. Static deformities.
6. Congenital anomalies.

Each heading is then subdivided and amplified, and on this plan the volume is built.

RANDOLPH SMITH, M.D.

#### ABSTRACT

#### A CASE OF MENINGITIS DUE TO TORULA HISTOLYTICA

By J. C. Masee, M.D., and J. S. Rooney, M.D. (Abstract from J. A. M. A., Vol. 94, No. 21. Page 1650. May 24, 1930.)

A case is reported in which a 32 year old housewife entered the hospital with symptoms of a subacute meningitis of several weeks duration. In the spinal fluid were found highly refractile cells, some of which were budding. On culture these proved to be *Torula Histolytica*. The patient died and autopsy revealed numerous lesions in the brain and meninges. The brain lesions were characteristically perivascular infiltrations with the torula organisms while the lesions in the meninges were typical tubercles containing the organisms.

This organism was also cultured from the meninges and heart blood and showed characteristic cultural and staining characteristic typical of *Torula Histolytica*. Guinea pig injections caused the appearance of tubercular mesenteric lesions.

Infections with *Torula Histolytica* are one of four types of the budding fungus infections formerly grouped under the term blastomycosis. Of these, true yeast infections are very rare; infections of the nervous system with *Torula Histolytica* have been reported in eighteen cases; infection with *Oidiomycetes* is usually cutaneous but involves the nervous system as a part of a general infection; infection with the organism of

coccidioidal granuloma has recently been demonstrated in the nervous system.

In this case as in other reported cases, the symptoms and physical signs were inconclusive. The differential diagnosis lies between tuberculous or syphilitic meningitis, a typical encephalitis and unlocalized brain tumor. The positive diagnosis is made with the identification of the organism in the spinal fluid or pathologic specimens.

#### OBITUARY

*Dr. Forest P. Hudson*, Tucker; Georgia College of Eclectic Medicine and Surgery, Atlanta, 1909; aged 68; died at his home on June 6, 1930. His vocation was farming until rather late in life he began the study of medicine when forty-five years of age. Surviving him are his widow and two sons, John B. and Grover Hudson, both of Decatur. Funeral services were conducted from the Fellowship Primitive Baptist Church at Tucker and interment in the church cemetery.

*Dr. William Sterling Wilkinson*, Augusta; University of Georgia Medical Department, Augusta, 1895; aged 59; died at his home, 1326 Emmett Street on June 14, 1930. He was born and reared in Augusta. Dr. Wilkinson was a physician of high standing. He was medical examiner for the United States Pension Bureau during the administration of former President Taft. Surviving him is his widow, Mrs. Mamie Hanna Wilkinson. Interment was in the family cemetery five miles from Augusta on the Milledgeville highway.

*Dr. Cornelius C. Whelchel*, Comer; Member; University of Georgia Medical Department, Augusta, 1881; aged 76; died at his home on June 5, 1930. He had been in ill health for several months. Dr. Whelchel was a prominent physician and held in high esteem by all his acquaintances. Interment was in the Comer cemetery.

#### PSITTACOSIS

Harold G. Haines, Warren, Ohio (*Jour. A. M. A.*, June 7, 1930), reports three cases of psittacosis which developed as a result of contact with a sick parrot. These cases simulated typhoid or paratyphoid fever and at the onset were similar to ordinary grip, or influenza. The treatment was symptomatic, similar to that in typhoid (sponge baths, alcohol rubs, and the like). Sedatives consisted mostly of codeine for cough or restlessness. For stimulation Haines administered whisky when needed. He used a high caloric diet in all cases, when it was tolerated. The usual prophylactic measures adhered to in typhoid and allied diseases were used in caring for these patients. The outstanding points or peculiar symptoms noticed in the study of these cases were: 1. The insidious onset. 2. The lack of coryza or catarrhal symptoms. 3. Extreme weakness. 4. Constipation. 5. Persistence of headache and backache. 6. White blood cell counts only slightly above normal. 7. No enlargement of the spleen or liver. 8. Rose spots in all three cases. 9. Atypical pneumonia in two cases.

# Medical Association of Georgia

Next Annual Session, Atlanta, Ga., May 12, 13, 14, 15, 1931

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## HEALTH PLAYS

## Winners

"He Wouldn't But He Would," an original health play written and produced by the eighth grade of Dixie Consolidated School, Dixie, Georgia, won the first prize of \$50.00 given by the Georgia Tuberculosis Association in the Georgia Health Play Contest.

The second prize of \$25.00 given by the Junior and Senior High Schools of Atlanta was won by Waycross High School for their play "Melba Toast."

Martin Institute at Jefferson won the third prize of \$10.00 given by the Atlanta Tuberculosis Association. Last year this school won the first prize. Honorable mention was given to Dalton High School.

Both organizations sponsoring the contest, The Georgia Tuberculosis and Georgia Home Economic Associations feel that this health education project was most successful for all eleven plays submitted were of high caliber and many others were written and presented in various communities as a part of Georgia Health Week, sponsored by the Medical Association of Georgia. Other schools competing were Bass, Hoke Smith and Joe Brown Junior High of Atlanta, Grade 9, Dixie, Metasville, Moultrie and Sumner.

The judges of the contest were Mrs. P. H. Jeter, a member of the National Board of Drama and Pageantry, Miss Leila Bunce, Home Economic Supervisor of Fulton County and Dr. T. F. Abercrombie, State Commissioner of Health.

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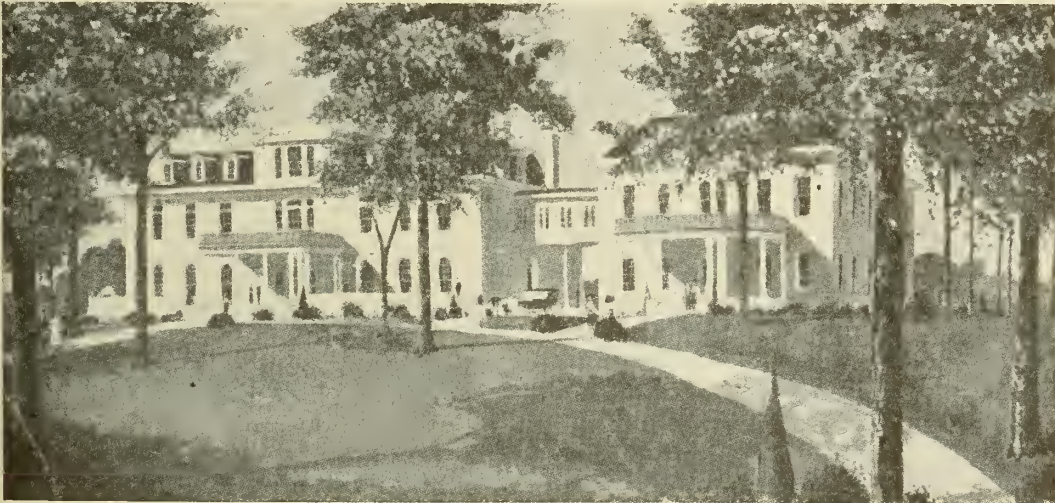
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ANDREAS VESALIUS, DE HUMANI CORPORIS FABRICA, 1543

## ANATOMY BEFORE VESALIUS\*

J. CALVIN WEAVER, M.D.

*Atlanta*

Gilbert Murray in "The Rise of the Greek Epic" appropriately said, "The difficulty of real knowledge of ancient things lies largely in the accident of our remoteness. We stand very far off, and have to strain our eyes. For us the comparison of ancient and modern is largely a comparison of something half seen at a distance with something we know intimately. We see only the bold outlines; we are apt to miss the little lights and shades. We have not the knowledge, nor the sympathy, to catch across the gulf of years the peculiar thrill of what was once a 'winged word' flying from soul to soul."

After millenniums of a gradual upward progress which can be traced to the records of the stone age, civilization springs forth, highly developed in the Nile Valley.

Neolithic man raised himself above the kindred races by the accidental discovery of copper in Egypt from which instruments were forged that raised civilization out of the slough of the stone age.

Though some writers claim for anatomy the highest antiquity, the oldest anatomical treatise extant is an Egyptian papyrus probably written sixteen centuries before our era.

It shows that the heart, vessels, liver, spleen, kidneys, ureters, and bladder were recognized and that the blood vessels were known to come from the heart. Other vessels are described, some carrying air, some mucus; while two to the right ear are said to carry the breath of life, and two to the left ear the breath of death.

Of the genuine works of Hippocrates, generally recognized as the father of medicine, none was expressly devoted to anatomy.

He had some knowledge of osteology, but of the structures of the human body in general his ideas were superficial and erroneous.

He knew the outlines of the cranium and the relative situation of the bones, but of the muscles and internal organs his ideas were confused and erroneous. He made no distinction between artery and vein, and the term "arteria", or air holder, is restricted to the windpipe. The word nerve was used to signify a sinew or tendon. The sum of knowledge possessed by Hippocrates and his immediate descendants represents the brain as a gland from which exudes a viscid fluid; the heart as muscular and of pyramidal shape, having two ventricles separated by a partition, the fountain of life, and two auricles, receptacles of air. The lungs consisted of five ash-colored lobes cellular and spongy; naturally dry, but refreshed by air.

Polybus, son-in-law of the physician of Cos, a recluse who severed himself from the world and its enjoyments for the study of anatomy and physiology, also showed rude and inaccurate information like his preceptor. He represents the large vessels of the body as four pairs; the first proceeding from the head by the back of the neck and spinal cord to the hips, lower extremities and outer ankle; the second consisting of the jugular, proceeding to the loins, thighs, hams, and inner ankle; the third proceeding from the temples by the neck to the scapula and lungs and thence by mutual intercrossing to the spleen and left kidney and the liver and right kidney; and the fourth from the fore part of the neck to the upper extremities, fore part of the trunk and organs of generation.

Thus we see that until the time of Aristotle (384 B. C.) there was no accurate

\*Read at the presentation of Vesalius De Humani Corporis Fabrica, 1543, to The A. W. Calhoun Medical Library, Emory University, Ga., May 27, 1930.

N. B. Illustrations are shown between pages 336-337.



knowledge of anatomy; all that was known being derived from dissection of lower animals, which was done in a desultory and irregular manner.

Aristotle was the father of Comparative Anatomy. Before the age of 39 he composed several works on anatomy, which, however, are now lost. It was he who corrected the idea of Polybus and others regarding blood vessels which he represented as being two in number and placed before the spinal column, the larger on the right, smaller on the left.

He was the first to call attention to the term aorta. Both he represents as arising from the heart instead of the brain. He represents the lungs as liberally supplied with blood, and the brain as an organ almost destitute of same. He represents the renal branches of the aorta as going to the substance of the kidney and not the pelvis, and mistakes the ureters for branches of the aorta.

He had most confused ideas of nerves, making them arise from the heart. He represents the aorta to be a nervous, or tendinous, vein.

Connecting all articulated bones by nerves, he makes them the same as ligaments.

He distinguishes the windpipe from the esophagus; he knew the use of the epiglottis, had some distinct notion of the larynx, mentions correctly the function of the windpipe, and had a tolerable understanding of the lung. He knew a great deal about the heart and just missed describing the circulation of the blood.

He knew many other details which time will not permit mentioning.

Next to Aristotle is Praxagoras of Cos, who was remarkable for having distinguished the arteries from the veins.

Until Alexandria became the repository of all the learning of the civilized world, anatomical inquiry had been confined to the examination of the lower animals.

While wars and internal animosities were ravaging the balance of the world, the Egyptian Greeks kept alive the sacred fires of science. Through their influence and broad vision Herophilus and Erasistratus bear the distinction of being the first anatomists who dissected and described the parts of the hu-

man body. They were the main support of the Alexandrian School. As their works were not preserved, there is little known of their respective merits.

It appears that Erasistratus knew the valves of the heart, naming them tricuspid and sigmoid. He studied the shape and structure of the brain, its cavities and membranes. He had a distinct idea of the nature of nerves, which he made issue from the brain, and discovered lymphatics in the mesentery. He probably distinguished nerves of sensation and motion.

Of Herophilus, he gave particular attention to those parts least understood. He recognized the nature of the pulmonary artery, knew the vessels of the mesentery, and first applied the name of "twelve inch", or duodenum, to that part of the alimentary canal next to the stomach. He gave a tolerable description of the liver. He first named the choroid plexus of the ventricles of the brain, and knew the straight venous sinus which still bears his name.

The above two names of the Alexandrian School overshadowed for a long time other investigators, until the appearance of Celsus, whose work has been designated "The most valuable depository of the anatomical knowledge of the times." It is in osteology that his information was most conspicuous. He enumerates the sutures of the cranium and describes the superior and inferior maxillary bones and the teeth, and in fact most of the skeleton. He gives a good idea of articular connections and mentions that cartilage is always present. He knew the ethmoid plate and the semicircular canals.

Though after Celsus there appears the name of Marinus, who gave an account of the muscles, and Rufus, a Greek physician, who studied Comparative Anatomy, directing attention to the tortuous course of the uterine vessels, and recognizing at this early period the Fallopian tubes, none of the authors of antiquity held so just a claim to the title Anatomist as *Claudius Galenus*, who was born about the one hundred and thirtieth year of the Christian era. At the age of 19 he began the study of Anatomy. Finishing this course he returned to his home city of Pergamum. He was intrusted to treat

the wounds of gladiators, which he did with much success.

The osteology of *Galen* is undoubtedly the most nearly perfect of the departments of the anatomy of the ancients. His description of the cranial bones almost parallels those of today. He gives the first clear account of the number and situation of the vertebrae, which he divides into cervical, dorsal, and lumbar, and distinguishes from the sacrum and coccyx.

Though he appears to less advantage in myology, he nevertheless carries this part of anatomy to greater perfection than any of his predecessors. He describes the frontal muscle and the six muscles of the eye. In fact, he named so many muscles and swerved so little from actual facts that most of the names by which he distinguishes the principal muscles have been retained by the best modern anatomists.

His knowledge of blood vessels was the most imperfect of his works, though he did prove in opposition to Praxagoras and others that the arteries contained blood instead of air.

He knew considerable about the brain, the thoracic organs, and was generally accurate in his description of the abdominal organs. His habit of faithful observations seems to have been so powerful that in the description of material objects his genius invariably rises above the circumstance of his age. By diligence in dissection and accuracy in description, he gave the science a degree of importance and stability which it has retained through a lapse of many centuries.

His death at Pergamum in the seventieth year of his age, and the two-hundredth of the Christian era, may be regarded as the downfall of anatomy in ancient times.

Interest in anatomy soon sank into a state of total inactivity, and was utterly neglected during the long and uninteresting period commonly known as the dark ages.

Though anatomical learning neglected by the European nations is believed to have received a temporary cultivation from the Asiatics, very little was probably accomplished as The Koran denounced as unclean one who touches a corpse, while the rules of Islam forbid dissection.

The era of Saracen extends learning to the thirteenth century, after which anatomical interest assumed new life.

In the School of Bologna, anatomy was cultivated as an appendage of surgery rather than as a branch of science. Several of the outstanding men borrowed chiefly from *Galen*. Conditions marked time at Bologna until the development of Mondino, in the fourteenth century. A teacher of originality, his zealous cultivation of the science caused it to rise from the ashes in which it had been buried. In 1315 he dissected and demonstrated the parts of the human body in two female subjects.

His anatomy of the heart is wonderfully accurate. He described important parts of the brain, particularly the ventricles, dura mater, and choroid plexus. He mentions most of the cranial nerves, though not in the order of the moderns.

Gabriel de Zerbis of Verona at the conclusion of the fifteenth century showed one superiority over Mondino in knowing the olfactory nerves.

More distinguished than any of this age in cerebral anatomy was Achillini of Bologna, a pupil of Mondino, who appeared at the close of the fifteenth century. He is known as the first who described the two tympanal bones, termed malleus and incus. In 1503 he showed that the tarsus consists of seven bones. He mentions the opening of the ducts later described by Thomas Wharton (1610-1673).

He was more accurate in his description of the organs of the right lower abdominal quadrant than any of his predecessors.

Not long after Achillini there flourished at Bologna in the beginning of the sixteenth century, Baranja, a most eminent and zealous anatomist. He dissected over 100 bodies. In his compendium he rectifies many of the mistakes of Mondino, giving minute and accurate descriptions. He is the first to mention the several textures of which the human body is composed, mentioning the characters and properties of fat, or membrane in general, of flesh, of nerve, of ligament and muscle in general. His wood cuts of muscles, though crude, showed that anatomical drawings in that early age were beginning to be understood.

He was first to mention the vermiform appendix. His was the first description of the thymus. He improved on the knowledge of the brain, having priority of the corpus striatum. He mentions the pituitary gland, the passage to the fourth ventricle, the pineal gland, and the fourth ventricle itself.

The distinction that Italy long retained of giving birth to the eminent anatomists of Europe, the glory acquired in the names of Mondino, Achillini, and others was destined to become more conspicuous by the labors of Fallopius and Eustachius.

The sixteenth century had commenced before France began to acquire anatomical distinction in the names of Jacques Dubois, Jean Fernel, and Charles Atien.

Jacques Dubois (1478-1555), under the Romanized name of Jacobus Sylvius, has been fortunate in acquiring a reputation to which his researches do not entitle him. Although he was without talent for original research, his name will go down in history as the teacher of Vesalius, author of the *Fabrica*, which was described by Osler as "the greatest book ever printed from which Modern Medicine dates."

With all due respect to the physician-anatomists, the impulse to study human anatomy by frequent dissection and to make accurate drawings of the structure was to come from an unexpected source, the great Florentine painters.

The painters first assisted at the dissections conducted by their doctor friends and then began to dissect for themselves.

The first artists to take up the scientific study of anatomy was apparently Donatello. From Donatello to Leonardo, who has been referred to as the first of modern anatomists, there is an unbroken line of truly great artists, whose work was based entirely upon dissecting and natural observation.

Leonardo, himself, to forward his project of writing an anatomical treatise, with Marc Antonio, did no less than fifty dissections and made over 750 separate drawings.

As Streeter says: "The influence of Leonardo upon practical anatomy is decisive; he steps into a place of intolerant central glory."

Fifty years later, into the breach he made, Vesalius entered!

ANDREAS VESALIUS: 1514-1564\*

### *A Sketch of His Life*

MERRILL WATTLES†  
*Emory University*

Andreas Vesalius was born in Brussels at midnight as the last day of 1514 passed to the first of 1515. He hailed from a family of noted physicians and scholars. His great-grandfather, John Vesalius, was physician to Mary of Burgundy, the first wife of Maximilian I. His grandfather, Everand Vesalius, also a physician, was a scholar and classic and a translator of some parts of the works of Hippocrates, Galen, and others. His father, Andreas Vesalius, apothecary to Margaret of Austria and to Charles V, was also quite noted.

We find that Vesalius' early tastes were for anatomy, including dissection of lower animals. He received his classical schooling at Louvain, Cologne, Montpellier and Leyden. He excelled in these studies, but his great genius had not yet a chance to show itself.

In 1533 he went to Paris to study medicine under the great masters Sylvius and Guinterius, becoming a fellow student of Servetus, the discoverer of the lesser circulation. Vesalius describes this phase of his career as sadly deficient. He did not like Sylvius and disapproved of the methods of teaching. He says, "My study of anatomy would never have succeeded had I, when working at medicine in Paris, been willing that the viscera should be merely shown me and to my fellow students at one or another public dissections by wholly unskilled barbers, and that in the most superficial way. I had to put my hand to the business." It was this thirsting for first-hand information and the desire to see the body as it really was, which brought out his hidden genius and made him the Founder of Modern Anatomy.

In 1535 he left Paris to serve in the army

\*Read at the presentation of Vesalius *De Humani Corporis Fabrica*, 1543, to The A. W. Calhoun Medical Library, Emory University, Ga., May 27, 1930.

†Student, Emory University School of Medicine, 1933, Emory University, Ga.

N. B. Illustrations are shown between pages 336-337.



under Charles V, the Holy Roman Emperor. After two years he went to Italy and delivered lectures at Pisa, Bologna, and many other cities. His fame in anatomy was now quite widespread and led to his appointment by the Republic of Venice to the Professorship of Surgery and Anatomy at the University of Padua, where he conducted public dissections.

Here, under the powerful influence of the Senate, Vesalius was able to obtain a liberal supply of material for his studies, a feature impossible in any other part of Europe at this time. He was 23 years old at the time of his appointment and held the position for seven years. It was during this period that Vesalius composed most of his great work, "de Fabrica." Upon this work rests the fame and glory of Andreas Vesalius. By it he wrote his own immortality. Were it not for "de Fabrica" the name of Vesalius would only be a minor tradition, so we must consider this great work in a place by itself.

In 1544, Vesalius left Padua, on whose university he had brought immortal fame and in which he had acquired for himself lasting renown. It is not known definitely why he left Padua at this time. The most reasonable theory was that he became discouraged at the way his book was received. Among those who criticised him most severely were his old master, Sylvius; his pupil, Columbus, and his successor, Fallopius. It is certain that he accepted the offer of Charles V to become court physician. This ended the scientific career of Vesalius at the early age of thirty.

Upon the accession of Philip II to his father's throne, Vesalius was retained as court physician and went with the Emperor to Spain in 1559. At the court he was held in very high esteem and became very wealthy.

In 1562 Vesalius left court, but no one to this day knows for what reason. Some said it was because of domestic troubles, or because of an attack by the school of Galenists, or that he was tired of court life. It is very probable that the best conclusion set forth is that of Hubert Longues, who contends that Vesalius performed a necropsy on a young Spanish nobleman whom he supposed to be dead. Upon opening the body

to find the nature of the disease, an onlooker claimed the heart to still be beating. The parents, learning of this, reported him to the Inquisition, thinking that before this body he would surely receive severe punishment. The Emperor heard of the incident and, being a friend of Vesalius, took matters into his own hands, ordering him to make a pilgrimage to the Holy Land to atone for his error. If this story is true, Vesalius failed to distinguish catalepsy from death, a pardonable error in his day, and perhaps a pardonable error even now in extreme cases.

Upon leaving court he went to Venice and while there visited old friends who had been students with him. From Venice he proceeded to Cyprus, and thence to Jerusalem. Here he was like one who had lost caste for a time, if not permanently. But soon he was informed of the death of Fallopius and he was offered the Chair of Physics which was thus made vacant. In 1564 he set sail for Italy to accept the offer, but the little ship upon which he had taken passage was wrecked on the island of Zante. Here the Father of Anatomy died of cold and hunger, on October 15, 1564. A goldsmith of Venice recognized the body and gave it a modest burial in the Church of Our Lady, in Zante.

Before we look into either the personality of Vesalius or his works, we must understand the age in which he lived. The Renaissance had begun. The Reformation was at its height. The darkness of the middle ages had faded away in the dawn of modern times. There could have been no more appropriate time for Vesalius to accomplish his great work.

His principal works were: "Tabulae Anatomica," printed at Venice in 1538, and including six anatomical plates. The "Epitome", printed in 1540, an atlas compendium of "de Fabrica", a very remarkable work for its plates. The essay on China Root in 1543, which criticises Galen and is especially valuable in that it throws light on the life of its author. His last work was "De Fabrica Humani Corporis", the one for which he will always be remembered.

Vesalius probably started "de Fabrica" while in Paris studying under Sylvius, but

the greatest part of the work was done while he taught at Padua. "De Fabrica" was dedicated to his patron, Charles V, in 1542. It was published at the press of J. Oporinus in Basle. "De Fabrica" was completed in 1542, when he was but 28 years of age, and consists of 659 pages with illustrations by John Calcar. The plates that occur in this book are perfect in every sense. Never has there been anything to surpass them. They are in every detail the work of a master. The systems depicted are the skeletal, muscular, respiratory, circulatory, nervous, digestive, and generative. Probably the best plates are those of the skeletal and muscular systems.

The text is plain, concise, and deals with nothing but common sense. The strangest fact of the whole text is that the author could reveal so much and discover so little. For example, he laid the whole circulatory system bare, but he knew nothing of the circulation. He saw heart, arteries, veins, and valves, but knew nothing of their functions. This was left for Harvey, who probably never would have seen it had it not been that Vesalius had traveled the circuit. There were twenty-five issues of "de Fabrica" between 1543 and 1782.

Immediately "de Fabrica" stood forth the foundation of human anatomy. For admiration, for criticism, for study, the subjects were open to admirers and scholars. The subjects, the text, and the plates, all agreed. It formed the foundation of medicine as a science. It simply showed the real structure of the human body. From 1543, anatomy began to be Vesalian, while the author passes into the background. "De Fabrica" marks a great epoch in the history of anatomy, for by it "the idol of authority in anatomical science was shattered to pieces never to be put together again." We must understand that before this time, truth and science had come to mean simply that which was already written and inquiring to mean mere interpretation of this. Vesalius described the body structure as he actually saw it in his dissection. "He insured the success of the new method of inquiry, the method of observation as against interpretation; he overthrew authority and raised experience;

he put the book of nature, the true book, in place of the books of Galen, and thus made free and open the roads of inquiry."

At the time of the publication of "de Fabrica" Galen and authority remained supreme in anatomical thought through the teaching of Sylvius. He was the last of this school; his teachings and systems were both swept away by the flood of new learning embodied in "de Fabrica".

At the time of the publication of his great work, Vesalius was accused of stealing its material. Its greatness was realized, but it was said to be stolen "light", stolen with ungenerous concealment of its prime sources. It was also said that the book held up for scorn the master who had previously struck the light and had held it up to the stealer.

It is very true that Vesalius mastered all the knowledge that had been compiled before his time, receiving his foundation from the works of Galen, Mondinus, and others. In spite of this we may call Vesalius the Father of Anatomy, in the sense that before his time there was no true science of anatomy and no accurate textbook. Upon this foundation he worked, dissecting and describing the human body as no man had done before. His was a direct appeal to nature, to what he called the only true bible.

Vesalius observed for himself and set up the method of direct ocular inspection and exact observation as a method of inquiry. He appealed to nature, and not to the doctrines or authority of individuals. His anatomy was that of the human body.

"The physical and mental qualities which met in this man were as rare as they were remarkable and potent. They were what were precisely wanted for the great task, a task as hazardous as it was momentous." Vesalius was physically perfect. His strength was linked with activity—always a happy combination. His mental activity ran in the richest vein. He was an artist, a craftsman, a writer, an observer of nature, and a maker of history."

Garrison says of him, "The most commanding figure in European medicine after Galen and before Harvey. There were plenty

before him, but he alone made anatomy what it is today, a living, working science."

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### THE PUBLISHED WORKS OF VESALIUS\*

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The first work of Vesalius, published in 1537, was a translation of the ninth book of Rhazes, the Arabian physician. His other works include the *Tabulae Anatomicae*, 1538; the *Epistle on the China Root*, 1542; *De Humani Corporis Fabrica*, and *De Humani Corporis Fabrica Librorum Epitome*, both published in 1543. The *Tabulae Anatomicae* consists of six anatomic plates. Only two copies of the original are known to exist, but it was reprinted in facsimile in a limited edition by Sir William Sterling Maxwell in 1874. The *Epistle on the China Root* contains much acute criticism of Galen, and is especially valuable for the light it throws upon the life of Vesalius. The *Epitome* and also the famous *Fabrica* came from the press in June, 1543, after more than three years of careful, untiring labor. The *Epitome* is rarer than the *Fabrica*. It was issued in loose sheets and perfect copies are rarely found. Both works are superb examples of beautiful wood cuts and typography.

The printer of the *Fabrica* and the *Epitome* was Johannes Oporinus of Basle. There has been considerable discussion as to the artist who made the drawings for Vesalius' works, but it is now generally conceded by authorities to be Jan von Kalkar, a pupil of Titian. Kalkar was the first to attain what Choulant calls the true anatomic norm, that is, a picture at once scientifically exact and

artistically beautiful. The splendid woodcuts representing magnificent skeletons and flayed figures, dwarfing a background of landscape, are unsurpassed, and were copied or imitated by a long line of anatomic illustrators.

The above named works, five in number, are the principal writings of Vesalius which are extant today.

The publication of the *Fabrica* caused a great stir among learned physicians from one end of Europe to the other. Acting under the influence of personal jealousy or blinded by the belief that it was impious not to accept without questioning the descriptions made by Galen, they attacked the work of Vesalius most vehemently. Vesalius, bitterly depressed by the bigoted opposition of his contemporaries, in a fit of passionate rage, committed to the flames all his books and manuscripts. The latter, it appears, contained not only the fruit of many years of laborious anatomical and physiological research, but also a large number of notes on pathological anatomy.

Even though the work of Vesalius was severely criticised, it was also widely copied. In the sixteenth century authors enjoyed but little protection for their literary property. "Cum privilegio," which was equivalent to our modern copyright, meant an extremely local and transient protection from infringement. The unauthorized printing of the whole or parts of books in another city or in another country was a common proceeding. The work of Vesalius was considered desirable game, and, to quote from Roth, the *Fabrica* of Vesalius was "admired, studied, followed, and plundered". The *Fabrica* appeared in at least twenty-five editions from 1543 to 1782, being issued in Germany, France, Spain, Italy, and England.

Shortly after the publication of the first edition of the *Fabrica*, Thomas Geminus of London copied all of Vesalius' plates engraved on copper in his work *Compendium totius anatomica delineato*. The text which accompanied the plates was simply a copy of the text of the *Epitome*. There is a special interest attached to the work of Geminus, however, as the plates are esteemed by ex-

\*Read at the presentation of Vesalius *De Humani Corporis Fabrica*, 1543, to The A. W. Calhoun Medical Library, Emory University, Ga., May 27, 1930.

†Librarian, The Calhoun Medical Library, Emory University, Ga.



perts to be the first copper-plate work in England.

From the artistic as well as the typographical standpoint no more superb volume on anatomy than the *Fabrica* has been issued from any press. The illustrations drawn by the friend and fellow countryman of Vesalius, Von Kalkar, are very much in advance of anything previously seen, except perhaps the drawings of Leonardo da Vinci. The wood-cut title page, one of the most celebrated pictures in the history of medicine, represents an anatomy or dissecting demonstration given by Vesalius at Padua, in an amphitheater magnificent in proportions and architectural design. In the middle a little beyond the foreground, Vesalius is surrounded by seventy or eighty students of all ages, ranged in three rows. By the side of Vesalius, an old man is drawing his tablets from his hanging pocket preparing to take notes. In the middle foreground, sitting or crouching on the ground, are the two barber surgeons, one of whom holds a dissecting razor which he is sharpening, while his companion passes another to the lecturer.

On the right, a man controls a barking dog; on the opposite side a youth has charge of a monkey which is biting a student's hand. Behind the lecturer is the crowd of spectators concentrating their attention on the wonderful demonstration proceeding before them. At the right and left above their heads are two men, one dressed in the fashion of the day and the other nude, standing against the nearest columns. In the center back is set up a skeleton holding a long staff in his hand. Above the columns are seen more spectators and in the windows above the entablature three other heads are visible watching intently.

The great cartouche, bearing the title of the work, supported by decorative monsters, hangs beneath the laurel-sprigged escutcheon charged with three weasels, the badge or device of Vesalius. In a small cartel at the level of the raised floor, inset in the square recess in front is the inscription: *Cum Caesareae Maiest Galliarum Regis . . .* and at the foot of the page, outside the field of engraving, is the word: *Basilae* (the place of publica-

tion). The imprint date and printer's name appear in the colophon at the end of the volume.

It is to be expected that in a design of this character the representation would be partly true and partly symbolical. In the amphitheater represented in the title page of the *Fabrica* we must recognize in all probability an imaginary building. At the time of Vesalius there was undoubtedly an anatomical building at the University of Padua, but it was most likely a much less pretentious structure of wood.

A detail of far greater importance is the insistence of the author and his artist upon the prominence of the skeleton which is set up in the middle distance. The value attributed by Vesalius to the human skeleton is implied in the central and dominating position accorded to it in the title-page. Its effect as a symbolic illustration is to be recognized by the fact that since the time of Vesalius, and only since his day, the decorative title-pages of numerous treatises on anatomy contain at least one skeleton. The imitation flatters his example.

The monkey and the dog on opposite corners of the plate are intended solely as symbols, for there is no question of comparative anatomy in a demonstration such as this. Vesalius had publicly proclaimed his contempt of the method of studying human anatomy through the lower animals. He underlined that scorn in the introduction of the dog and monkey relegated to disregarded corners.

Speilmann in his *Iconography of Andreas Vesalius* interprets the title page of the *Fabrica* as emblematic of the struggle of the "new anatomy" with the former empiricism. He says that the magnificent edifice signifies the nobility and sublimity of the art of medicine, whose aim is the alleviation of the suffering and miseries of humanity.

In front of the professor the young men are grouped; beyond them the aged; all are attracted alike by an intense and passionate interest in the manifestation of the Truth. In the crowd, the youths, by far the most numerous, represent the future. The three old men represent antiquity witnessing the

passing of their age-tradition, against which revolt is developing into triumph.

Behind the rail, or barrier, which separates the two groups of spectators, stands the public audience. We are shown the priest (the Church) motionless and expressionless, silently portraying neutrality in the strife which was agitating the scientific world. Beside him is a young student, who is represented as brought up in the old style, remaining a slave of the printed word, with his eyes on his book. The naked man grasping a column on the left and the clothed figure on the right symbolize, perhaps, study from nature and study from conventional teaching by books alone.

Lastly, the body before which Vesalius holds discourse is emblematic like the rest. It is the body of a woman, representing the source of life.

Vesalius speaks without a book, consulting no text, inspired solely by knowledge and fortified by research, setting forth his exposition simply and clearly, showing things as they actually are.

To appreciate the book properly we must know its author. We are often helped by the fact that many sixteenth and seventeenth century authors had sufficient conceit to preface their works with a portrait. It is often from these crude prints that we bridge the centuries and gain a bowing acquaintance with the author. The only authentic portrait of Vesalius was published in the original edition of his *Fabrica* and was reproduced in four of his works between 1543 and 1555. Kalkar's delineation of Vesalius has given us a representation of the actual man in his prime and at his work.

Vesalius is represented as a standing, three-quarter length figure, with a vigorous grasp of the left hand on the dissected arm of a female body, erect in position, of which we are shown but a portion, the shoulder and the right side of the trunk. In height the body seems to exceed that of the demonstrator, who, by comparison, appears to be a short man. The fact that the head of Vesalius seems, as has often been remarked, relatively overlarge, confirms the impression.

On the table lie a scroll, a scalpel, and a razor. The name of Vesalius is at the head

of the portrait, and the front edge of the table bears the inscription: An. aet. 28. 1542.

There seems to be something of the fanciful in the style of the draped curtain, the Doric pillar of the background, and the rich attire of the anatomist engaged in the work of dissection.

In the vignettes enclosing the capitals at the head of the chapters, Vesalius included a remarkable series of thumbnail sketches, which form humorous skits on the medical students portrayed as cupids, fat naked boys and gnomes. These vignettes throughout the volume form an interesting study in themselves. They indicate the difficulties attending the pursuit of anatomy, as well as the technique of various medical and surgical procedures. One vignette shows cupids disinterring by candle light a cadaver; another shows cupids macerating a skull by boiling in an iron pot hanging over a wood fire; another portrays a group placing the broken leg of a patient in a box splint. These sketches are not scattered arbitrarily, but are related to the text which follows the respective capitals.

The large initial Q which commences the preface to the *Fabrica*, dedicated to Charles V, depicts the vivisection of a young pig. One cupid is reading out of a book whilst another is cutting into the animal's neck in order to repeat one or another of Galen's experiments, either the division of the vagi nerves to show their control of the voice, or the performance of tracheotomy and the examination of the mechanism of breathing.

The illustrations designed by Vesalius for the purpose of delineating the skeleton and muscles form a remarkable series. There are in the *Fabrica* three skeleton and sixteen muscle figures, and in the *Epitome* two nude figures and five of the muscles, all drawn from well-developed young adults.

It is a special mark of the genius of Vesalius that he succeeded in portraying the muscles as if in the state of contraction required to produce the particular position given to the figures, and the skeletons suggest life and movement.

One skeleton is shown leaning on his grave digger's spade; another is deep in the contemplation of a human skull; the third has

and his forehead is resting on his clasped hands. His whole attitude suggests deep grief.

The second plate of the muscles shows a man who has been divested of all skin, fat, and superficial veins, and presents the muscles of the anterior portion of the body beautifully delineated. Vesalius took much pride in this plate and directed the attention of artists to it. The head of the figure is thrown slightly backward, the right hand pointing to the earth and the left raised towards the horizon. The whole attitude calls to mind the position which an orator would assume when addressing an audience.

The other myologic figures show the deeper muscles, layer by layer, and are of great value to an artist who wishes to study the effect of their action upon the superficial parts of the body. They are all remarkable specimens of the combined genius of the author and the artist.

These few illustrations will serve merely to give an idea of the scope of the entire work of Vesalius and will show why his name will be associated always with the foundation of modern scientific anatomy. In the *Fabrica* he cast off the shackles of Galen, which had bound the medical profession since the second century, and appeared as a bold, independent, research worker. The entire *Fabrica* breathes a new spirit of freedom and truth. Vesalius always has in mind the human body as a whole and not merely the structure of the part he is investigating. It is this sense of artistic unity which has knit the volume, with its endless independent observations, into a beautiful and intelligible whole.

#### SOLITARY CYST OF KIDNEY

Solitary cyst of the kidney was found by Herman L. Kretschmer, Chicago (*Journal A. M. A.*, July 19, 1930), in a series of five cases. He says: "This condition is probably not as rare as is generally thought by clinicians, especially urologists. A good roentgenogram ought to show the outline of the cyst in the majority of cases. In cases in which the cyst springs from the lower pole, its recognition from the roentgenogram should be relatively easy. Cysts in the upper pole are not so easily recognized in plain films, and when large they result in changes in the renal outline. The pyelograms may vary, depending on the size of the cyst, its origin and the direction of growth. In this series, one pyelogram was normal and two were definitely abnormal."

#### THE INFLUENCE OF VESALIUS\*

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Towards the close of John Freind's "History of Physick from the Time of Galen to the Beginning of the Sixteenth Century", published in London in 1725, 1726, he mentions Vesalius in the following interesting paragraph that is all the more interesting because Vesalius had been dead only 161 years.

"But, above all, in order to have a right idea of the state of Physic in this age, we should particularly trace and observe the great progress, which was made at once, within a few years, in anatomy. Jacobus Carpus, whom we mention'd before, was not only the first restorer of this fort of learning, but a great improver of it; he dissected above one hundred bodies himself, a thing at that time very much wonder'd at as unusual, and even barbarous; and in his other works, particularly that about wounds in the head, as well as his Commentaries upon Mundinus, he has left us many useful marks and discoveries, and brought the study of Anatomy into great reputation in his days. By his example many others were encourag'd to contribute what they could to the advancement of so necessary an art; amongst the rest Massa, and F. Sylvius bore a great share; till at last, before the middle of the century, Vesalius, by his indefatigable industry, brought it almost near to a degree of perfection. Soon after Columbus, Eustachius, and Fallopius, three great men in this art, and very eminent in their three different professions, or the three branches of Physick, advanc'd it as far as it well could be, without the discovery of the circulation."

Here in this remarkable paragraph the anatomists are mentioned that preceded Vesalius and by their actual dissections in the case of two of them, Mundinus and Carpus, led up to him. Sylvius was his teacher and a pure Galenist, though the chief anatomist of his time. He taught at Paris and was at the height of his influence from 1530 to 1555. his back turned, his spine is bowed forward,

\*Read at the presentation of Vesalius *De Humani Corporis Fabrica*, 1543, to The A. W. Calhoun Medical Library, Emory University, Ga., May 27, 1930.

N. B. Illustrations are shown between pages 336-337.



He was a curious mixture of miserly thrift, great memory, dogmatic personality, a devotee of Galen and yet he named and described many muscles and blood vessels. Mondino wrote the first modern work on anatomy which he called the *Anothomia*. This was a book on anatomy in the modern sense, for before him anatomy was to be found in the treatises on surgery. It is really a practical manual of anatomy and its author is called the "Restorer of Anatomy". Then Mondino dissected in person, actually himself did the work as a medical student does today. This was a distinct advance over the habit of the teachers of that day, who usually read from a high platform. The church had prohibited dissection, though Sixtus IV, Pope from 1471 to 1484, permitted the opening of bodies with permission from the church authorities. This stimulated the development of anatomy toward the close of the fifteenth century, and Pope Clement VII (1523-1524) confirmed the practice of dissection. At the University of Bologna dissection was approved in the University Statutes of 1405 and at the University of Padua in 1429. At Montpellier, public dissections were decreed in 1377 and at Paris in 1478. Printing had an influence that grew from the invention of movable type in 1450 to its use in medicine from about 1490 on.

From 1450 to 1550 art was reborn and with it came the accent on naturalism. Beginning with Andrea Verrocchio (1435-88) and including such masters as Leonardo de Vinci, Durer, Michelangelo, Raphael and Titian, all used the scalpel on the dead body, and all made dissections and drawings from them. The invention of printing, the revival of art and more particularly the accent on naturalism, the free and direct access to ancient Greek literature, an increasing freedom of thought incident to the lessening shackles of the church on the mind, permitted the revival of learning, and foreshadowed the birth of a true science of nature and life whose foundation and aim was truth based on observation, experience, experiment, and proof. Art was fermenting in anatomy and it was natural that soon an illustrated anatomy would be published. Jacob Berengar, of Carpi, professor of surgery at Bologna from

1502 to 1527, published two works on Anatomy; one called "A Commentary on Mondino" was really an original contribution based on actual dissections and containing figures illustrating the text. He first described the appendix, the thymus gland, the arytenoid cartilages, the larger proportional size of the chest in the male and the pelvis of the female, and added to the knowledge of the heart and brain. He used miserable Latin and this probably lessened the wider use of his books. Fugitive sheets which gave summaries and drawings and saved the student from too much work came into vogue. Charles Estienne of Paris (1503-64) published the most fully illustrated Anatomy of the pre-Vesalian anatomists.

And yet since Galen there had appeared in medicine no outstanding figure who was born with energy, gifted with personality, blessed with blood and family, of wide education and culture, powerful with the beauty, accuracy, and execution of his work, resentful of authority, forceful enough to issue his work, provided it conformed to the proof of nature, against all the organized beliefs, customs, and traditions of his art, medicine; of the jealousies of his colleagues; of the authority and dogma of his church; of the power to give and to take and to bind of his state. This man appeared in the person of one Andrew Wesel, called (in Latin) Andreas Vesalius; of whom Senac said he discovered a new world before he was twenty-eight; and of whom Garrison said, "the most commanding figure in European medicine after Galen and before Harvey." Singer, in a model paragraph, written in a threefold tale of art, mysticism and history, sums his coming:

"Few disciplines are more surely based on the work of one man than is anatomy on Vesalius. And yet it can be said that he is, in a sense, a lucky man in the position that he holds in the scientific world. His great work was not the result of a long lifetime of experience, as was that of Morgagni or of Virchow; it was not wrought in the fierce heat of an intellectual furnace as was that of Pasteur or of Claude Bernard; it was not a task of subtle reasoning, as was that of Harvey and Hales. Vesalius was a very characteristic product of his age. The womb of

time was in labor, and it brought him forth. His intellectual father was the Galenic Science that had gone before him. His mother was that fair creature, the new Art, then in the very bloom of her youth. Until these two had come together there could be no Vesalius. When these had come together there had to be a Vesalius. If it be genius to be such a product of one's age, then Vesalius was a genius. He was a strong resolute man of clear, firm-knit and unsubtle mind, and he fulfilled that for which his father and mother had begotten him. He did no more and he did no less. If, unrevealed by his one great work, the rock of his soul held yet further fastnesses, he so concealed them that no man has since entered therein, despite all the searchings of the scholars."

"The new art" has been discussed and now about this "womb of time" and the times of Vesalius. Above all, the mind of man was gaining its freedom. The struggle was not won but the mind was on the way, to study, to think and to conclude in harmony with the things as they are. The Senate at Venice had given much freedom to the University at Padua, but the Inquisition was still sitting in Spain, and the clash of church and science was in the very spirit of the times. Freedom was barking at dogma and science was snarling at authority. The Spanish and Portugese explorers were discovering new lands and a western world, and foreshadowing the time of Raleigh and Drake. In 1543, the very year that Vesalius published the *Fabrica*, Copernicus issued his system which eventually supplanted the Ptolemaic theory. But there were rough roads ahead for Copernicus himself. His theory had a happier time than he did. The printing press brought anew the rich language and wisdom of the greater Greeks, and as Welch pointed out, the writings of Celsus on Medicine. Botany, zoology, geology and mineralogy were developing. In botany the herbalists influenced medicine and particularly therapeutics, and this trend continued until it found its culmination in Bartram and Withering.

In medicine besides the names already mentioned, were such men as the Englishmen Thomas Linacre, who founded the Royal College of Physicians; and John Caius, who

described the sweating sickness and founded Caius College; the German Paracelsus, chemist and iconoclast and genius of the cave man type; and Pare, the French surgeon who tied bleeding vessels and wrote good French prose. Rabelais edited Hippocrates, dissected the body, taught at Montpellier and wrote his immortal stories. When Vesalius was nearly three, Martin Luther tacked his 95 theses on the church door at Wittenberg, fought Pope and King and died three years after Vesalius published the *Fabrica*. The cloistered Charles V was King of Spain, and Vesalius in his later life served him and his son Phillip II. Henry the VIII with all he was of good and evil was King of England. The wise Servetus was Andrew's fellow student at Paris. Later in a theological work he described the lesser circulation from the right heart, but all his study and thinking with the dipping of his pen in ink but brought him to the stake at the instance of John Calvin, who mistook persecution for Christianity. And a little more than six months after Vesalius died in 1564, Shakespeare was born and the Elizabethan period was on its way. Into such a world and at such a time came Vesalius.

These trends to so many new interests indicate not only a tremendous activity of the mind of the Renaissance, but a change of accents on the part of students and thinkers of the period. There had to be a change of accent from the authority of the medieval church to permit Vesalius to have any voice at all, much less to attain a permanent influence. Martin in his book, "Liberty" emphasizes this change of accent well.

"Renaissance scholars simply lost interest in the sacred and the supernatural and began to turn their attention to the secular, and to seek the guidance of human reason and intelligence in an effort to give beauty and meaning to living. It might seem to be a purely academic matter for these men to have begun substituting 'human letters' for the 'knowledge of divine things' of medieval scholastic education. But it profoundly affected the ideas of life and destiny, of liberty and the duty of man in succeeding generations. It set the mind free to explore the wisdom of the ages without bias or fear of

losing faith. It led to dependence on unaided human intelligence instead of submission to authority. It prompted men to try to understand and master the forces of nature; to express their human interests in the arts with unprecedented freedom, new appreciations of the true and the beautiful; it brought back to the minds of Europeans the daring, critical, questioning habits of thought of ancient philosophy and education; it emphasized personal independence and self-discipline; and it led men to see the maximum development and excellence of the individual as the great aim of human effort. I would not say that the Renaissance achieved all these things for anybody, or that it achieved any fraction of them for more than a minority of mankind. But where they have been achieved in any measure we are indebted to it. In contrast with a general way of life that had held sway for a thousand years or more, it marked the beginning of another way, the Humanist way, which has been the inspiration of the creative genius, of cultural achievement and the progress of liberty ever since".

With this rather necessary even if disproportionate introduction, one has clearly the background of Vesalius, the manifold directions of the mind of his period, the lift of the weight of authority and the subsequent quick march to reality, life and nature that resulted in the intellectual advance that we call the Renaissance. This manifold consideration permits the influence of Vesalius to be easily, briefly, and frankly outlined.

There is the influence of Vesalius the Professor of Surgery including Anatomy in the University of Padua from December 6, 1537, before his twenty-fourth birthday and just after he had received his degree to 1542 when he went to Basle for a year to superintend the printing of the *Fabrica*. The good start he had from a medical and famous family, the bent to dissection even as a boy, the hard study and classical training at Louvain, Paris and Padua had borne fruit in this full Professorship. We can imagine with what a shaking of heads and surprise the youthful genius was received. He started as a full professor. Genius knows no grades of lesser promotions. It is either genius, or if compared with genius, something mediocre.

There were trips to Venice and he lectured at the University of Bologna, but his time was precious and he worked hard accumulating his notes, writing a paraphrase on the ten books of Rhazes, teaching from his public dissections, and, above all, preparing with the aid of his artist von Calcar his *Fabrica*. He roomed in the same house with Caius, the Englishman. In five short years he revolutionized the teaching of anatomy because he taught from his own dissections on the dead body rather than read from a book. He showed that anatomy was to be learned from dissection and not from a book alone. He popularized dissection and the teaching of science. He made, until recently at least, anatomy the foundation stone in a medical course, introduced laboratory work into medicine and demonstrated what he taught as he taught it. By his work he showed that a teacher must work on the same ground as his students and learn with them. By his example and method of teaching he destroyed forever the authority of Galen, the high platform of his own teacher Sylvius, and more than any other man made Padua the successor of Paris as a medical center and flung far the fame of his subject, his teaching and his university.

In the second place, he revolutionized anatomy as a science, made of it an organized body of knowledge, so "that for the first time in history it could be presented in a way that explained the entire structure of the human body". Even good teaching fades from the memory except that its principles and influence may survive in the individual and through him with less impress upon others. Children die or too often disappoint the hope of parents; monuments erode and shallow unreadably their chiselled praises or time cracks and scatters them; but the printed page, alive with genius, accuracy, and fact, carries on to the mind of the generations. The precious printed page is a greater promise of mortal perpetuity than is child or marble or gift. In 1543 at Basle, Vesalius issued his *Fabrica*, the first and greatest book of modern medicine, the keystone of the arch of the art, "one of the greatest books of the world, and would come in any century of volumes which embraced the richest harvest



of the human mind." Without it Vesalius would be but a ghost of memory. It was copied, pirated and plagiarized, translated in many languages, a second edition issued in 1555, an immortal book as books go, and it made Vesalius immortal as men go. All other anatomies find their primal source in it; paper, print, and art of drawing are here joined. The greatest of all anatomists had finished his professorship and published his book at 28. This book is the richest bloom of the medicine of the Renaissance.

In the third place, he had so magnified anatomy and its teaching that anatomy became separated from surgery and was made a chair in itself. His was apparently the first chair of anatomy ever instituted in a university. Others had taught at anatomy, he actually taught anatomy. He appealed to the dead body rather than to Galen or any other supposed authority. In one he is the reformer, maker, and teacher of modern anatomy. As he taught with certain improvement anatomy has been taught ever since; as he wrote anatomy, with certain improvements, it has been written ever since. Under his influence every medicine school has had a chair of anatomy. He taught by the dissecting method and established it.

In the fourth place he not only made anatomy a new science and a new possession for the world, but established a line of anatomists in his students and followers. The scientific method had taken on a new meaning. There was more in nature and experiment than in authority. It was natural that other minds should enlarge anatomy by valuable contributions. His genius was the pioneer that led the way. About him the battle had raged with the church, with the followers of Galen, and with the ever-envious ones among his colleagues. His successors naturally copied his methods, made new discoveries, refined the science, and supported anatomy in its proper place. Realdo Columbus was his assistant and wrote anatomy nearly devoid of illustrations, but containing a few new observations. He put the lens in its proper place in the eye, described the pleura, mediastinum and peritoneum, introduced the words pelvis and bregma and wrote well of the circulation and of vivisection. However

Columbus unpleasantly attacked Vesalius and in other ways hardly rings true. He did contribute much to anatomy and was himself the product of the master, Vesalius.

Gabriel Fallopius was another pupil of Vesalius and succeeded Columbus. He published his "Anatomical Observations" in 1761, described the tubes which are named for him; the ovaries, the round ligaments; named the vagina and placenta; introduced such words as cochlea, labyrinth, hard and soft palate, and velum palati. He described the chorda tympani, the semicircular canals, the sphenoidal sinuses, and the trochlear nerve as a separate root. He was a real teacher of excellent character and manner and was a credit to Vesalius.

One of his pupils, the famous Hieronymus Fabricius Aquapendente, succeeded him at Padua and built at his own expense the anatomical theater at Padua, which is still standing. Here Harvey was a pupil of Fabricius, and his painted shield is still on the ceiling of the arcade. He graduated in 1602 and Fabricius resigned his chair in 1604 to devote himself to his researches and writings. Harvey probably saw Fabricius demonstrate the valves in the veins and may have helped in the dissections, for the "De Venarum Osteolis" was published by Fabricius in 1603. Then while Harvey was a medical student at Padua, Fabricius also published his "De Visione, Voce et Auditui" in 1600; his "Tractatus de Oculo Visuque Organo" in 1601, and his embryology on which Harvey relied for his treatise on "On Generation" published in 1651. Harvey's only figure in his great book "On the Motion of the Heart" was taken from Fabricius. Osler says that "late in life, Harvey told Boyle that it was the position of the valves in the veins that induced him to think of a circulation. Further, Fabricius "On Development of the Eggs of Birds" made embryology a new and independent science. Harvey gained much from this book. He then added another work "On the Formed Foetus". Another work "On the Respiration and Its Instruments" illustrates the signs of an oncoming physiology which reached its flower in Harvey, who went back to England the best trained anatomist of his day with a

slumbering idea born of his student days with Fabricius, the last of the great Paduan teachers. The Vesalian line is complete, but how far reaching a line. A man to a university is worth more than a million, nay than many millions. What price man is Vesalius the anatomist, Fabricius the embryologist, Harvey the physiologist. Harvey's little book of seventy-four pages published at Frankfurt in 1628 on "De Motu Cordis" would likewise come into the hundred books which represent the highest amplitudes of the human mind, and near would be one or more of the books of Fabricius.

In the fifth place, Vesalius, his successors and their students, with the triple sure foundations which they laid and made for anatomy, embryology, and physiology, began the enormous and varied structure which we call modern medicine. They proved that facts, their relations and inductions, and truth their collective conclusion, were the path of science and the method of its progress. Authority as such for science died. Henceforth the facts of nature were the monitors and masters of science. Vesalius made medicine a free science, the medical mind a free mind, the medical world a free world. He showed how a genius who concentrated could work. He had sat at the feet of many Gamaliels before students sat at his feet. He shows what training will do for the medical mind. Familiar with the classics, he added German and French, Italian, Hebrew and Arabic, made the body the true Bible of anatomy, foreshadowed embryology and physiology, and added to the training of every medical student since his day. What might he not have done for medicine had he not burned his notes and papers and quit his studies at 28? He was young and sensitive, but even a genius cannot get mad and destroy his papers and notes. The gods destroy those who first get mad. And then his success as a court physician was but the natural result of his general culture, his training in anatomy, and an illustration of how intensive training in any one branch of medicine may make one an improved clinician. Poise, analysis, and proportion are choice traits of the clinical mind. Singer points out that Sharpey was a student at Padua and the

first occupant of the first chair of physiology in England. He owned and studied original copies of the Paduan anatomists—Vesalius, Fallopius, Columbus, Casserius, Spigelius, and Harvey. This indicates the way of his influence in England and in all countries. Ball sums Vesalius in a long sentence and a short paragraph:

"The man who overthrew the authority of Galen; revolutionized the teaching of the structure of the human body; started anatomical, physiological, and surgical investigations in the right channel, first correctly illustrated his dissections; destroyed ancient dogmas, and made many new discoveries—this man, Andreas Vesalius of Brussels, deserves the name which Morley had given him, 'the Luther of Anatomy'."

The books on medical history refer to him again and again. He ever finds his way into text and index. The past in medicine seems to have come to stop with him; the present in medicine seems to have had its beginning in him. This meeting tonight but illustrates his influence as present and permeating the medical life of Atlanta. What book but the Fabrica, what man but Vesalius would have been the motive for such exercises as these? And all done in honor of the work of a young man in the twenties. He is a triumph of science. He lives on. He and his line illustrate that loyalty to knowledge and the things of the mind that make research and scholarship always the frontier of that region which we moderns call progress, and the rich reward of the true physician. The ancient Greeks spoke of it as "always seeking some new thing". He gave of his mind to medicine and to knowledge, and in the courts of Europe as the King's Physician he no doubt often realized, in the words of one who is to drama what he is to Anatomy—

"Oh, this life

Is nobler than attending for a check,  
Richer than doing nothing for a bauble,  
Prouder than rustling in unpaid-for silk."

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The medical profession is heartily in favor of any publicity which will educate the public in questions pertaining to health and enable it to distinguish between scientific healing and charlatanry.—The New York Medical Week.

## THE MEDICAL LIBRARY

WILLIAM KISER, M.D.

*Atlanta*

The conquest of time and space was accomplished by books long before the advent of the aeroplane. On the wings of these patient friends of the night one may fly back through the centuries to stand by the side of the masters, "the creators of human intelligence." With the world's knowledge gathered into a library, man is indeed monarch of more than he can survey.

The works of Galen probably filled a shelf five feet in length. This was held to be of such sufficiency that "fifteen centuries stopped thinking, and slept until awakened by the *de Fabrica* of Vesalius." The timely arrival of movable type has given us a record of this revolt against constituted authority under the leadership of Vesalius. Since then the type has not ceased to move so that the output of the press dwarfs the magic salt mill of the fable. Now huge archives are required to house a world of books. This storehouse of knowledge, almost "measureless to man", contains not only the record of the past, but also the answers to some of the riddles of the future.

"To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all." These two essentials of the medical school were concisely stated by Osler. The cause of both patient and books he ably championed. At 26 we find him traveling from Toronto to Boston to look up a "small matter" which he wished to "make as complete as possible". His appreciation of the value of a library came early and "lingered late". His benefactions to libraries are well known. He seems to have made gifts to everyone in which he ever worked—a fruitful custom to encourage. During his many trips to Europe he "sanctified his fees" by sending back old books to "his" libraries. Of the *Fabrica* of Vesalius he said, "It is difficult to speak with moderation." So highly did he prize this book and so anxious was he for McGill University to

have it that he sent them a second copy, forgetting that he had presented the first six years before.

The medical library serves a variety of people. For the clinical professor it is the chief source of his lectures. It is his critical judgment which so illumines the current literature that it is clearly visible to the dark adapted retina of the student. For the student it should be one of his classrooms, not where he learns to sail the seas, but where he learns the use of charts by which he may later navigate. For the investigator it is the beginning and end of his labors. Here he first searches the record of Nature's shy answers to the fumbling questions of man. From the successes and failures of others he strives to more skillfully pose his questions. It is to the library he returns to compare his result with that of others. For this he must have the records of past generations as well as of yesterday. For the practitioner it is his salvation, the slender thread which links him to the present. Remy de Gourmont likens education to a bag of salt laboriously loaded onto the back of a donkey and sure to melt in the first storm. So the physician on leaving his medical school carries a load much of which will be dissolved by the torrential rains of Science. Commencement orators are never weary of saying, "This is but the beginning of education," while commencement audiences seem ever to forget. With the fruits of the world's teachers, clinics, and laboratories at his finger tips in a library it is within the power of everyone to keep pace with the present. The physician differs from the classic Athenian who was forever in search of "some new thing", in that he is called upon to discriminate among many new things and to evaluate them. The alluring pamphlets of the drug houses are not an adequate background for the proper use of insulin. The experience of others must be carefully studied. The literature of medicine has become so vast that it is beyond the reach of the physician's purse and so of necessity must be shared in common.

There is another function of the library so apt to be lost sight of in these utilitarian times. This is concerned with what Plato



called the "higher education" and which he "reserved for the few". This is the pearl of great price not to be bought in the market place. It is not reserved for the few, but only the few attain it. It is that indefinable thing called culture which is not revealed by the cut of the cloak or the size of the house. About the face of some it shines as a glory, in others it may be dimly seen. By it "those finer spirits, all too few, have been touched to finer issues." This thing concerns us all—teacher, student, investigator, practitioner, all members of the profession which Sir Thomas Browne classed as "Noble". In the shrine of the library this flame is tended by a faithful Vestal. Under her tender guidance we are initiated into the mysteries. And she must needs be tender, for the novitiate is not the brazen one of the bazaar nor the brawny one of the arena. He is more like one bewitched. His dazed look betokens the inward struggle with an idea for an ideal. From the musty volumes we hold "close communion" with the masters of ancient times. "Their deeds we learn to cherish, their lives we strive to emulate." From the walls their faces look down upon us as if in benediction. The great discoverers of all time hang side by side with our own wise men. To this one we "bend a knee", not for what he did, but for what he was; to that one not for what he received, but for what he gave. Ranged about are the relics of these departed saints. Here the instruments, boots and saddle bags of some bold courier of fate; there the spectacles of some minor oracle through which many a patient has read his doom. Under the incantations of the priestess-sorceress "the past is so made to sit to meet with the present" that the student becomes unmindful of the intervening centuries. From this mansion of many windows we can see the distant hills with their half-hidden pathways leading upward to the stars.

There was a time in our country when bookishness was thought an affectation. Then there was sterner work to be done, the unwilling ground had to be made to yield its fruit, the unfriendly forest its foe. There were such books as "those who run

may read". But now we have reached the "Middle Age, unwithered yet of time, but freed of all youth's blinding loves and hates". In the freedom and leisure of such maturity we may pause to set our house in order for the cultivation of that "larger life".

It was said of Aristotle that he knew everything that was known in his day. To carry on his good works he was given a liberal endowment of 800 talents by his former pupil, Alexander the Great. In our time the sum total of human knowledge can repose only in a library. Modern Alexanders have not been lacking to furnish endowment. Today the conquest of such a world is becoming impossible even for an Alexander. A new force is making itself felt in that the combined effort of the many is doing what was beyond the power of the individual. It is noteworthy that in the purchase of the Vesalius for the Calhoun Library the list of "givers" is a long one, and not the least part of the sum was supplied by the students. The university president regards the library as one of the most voracious of his children, but it is not to be doubted that it will be well cared for by the community which has learned to love it.

"The great possession of a university," said Osler, "is its great names." Along with them should be put its library which was the cradle of their greatness, sometimes the only sepulcher of their fame. The A. W. Calhoun library of Emory University is to be congratulated on its recent acquisition of the work from the pen of Vesalius—"the father of anatomy." The virtues of its Vestal are known to many, though her magic is less easily understood. Its Alexander has pointed the way to worlds which a united group of Alexanders yet may conquer.

Medical Arts Building.

#### RECONSTRUCTION OF URETHRA AND PENIS FOLLOWING EXTENSIVE GANGRENE

In this case R. S. Mallard, Fort Worth, Texas (*Journal A. M. A.*, Aug. 2, 1930), used a skin flap from the abdomen because there was not enough skin left on the penis following a gangrenous process to be used as a flap. A free graft of full thickness of the skin from the thigh was first used unsuccessfully. The final result is not perfect, but the patient is able to have sexual intercourse in some satisfactory manner and to void through the newly constructed urethra.

## MUTUAL PROBLEMS IN THE CARE OF OUR SICK\*

JANE VAN DE VREDE, R.N.

Complete medical service is a tripod, as Dr. W. S. Rankin expresses it, with the physician, the nurse, and medical facilities, or the hospital, as three definite uprights, joined at their apex in the interest of the patient. If, as he suggests, any one of them failing to function results disastrously for the patient the problems of the Georgia State Nurses Association, the Medical Association of Georgia, and the Georgia Hospital Association are definitely interwoven and inter-dependent for their solution. A recognition of this fact, no doubt, is responsible for this opportunity to come before you, and indicates one method of how physicians and nurses in organized service may understand the angles of the complex problem of rendering the best care to the patient possible. They should understand and agree as to their separate contributions and the best methods of making them.

The Committee on the Cost of Medical Care in its abstract of No. 2 publication gives us the incidence and loss of time from illness which should help us to organize our facilities for the care of illness, with emphasis to more nearly meet the needs of the sick.

The United States Public Health Service contributes the information that there would be (on the basis of the lowest rate for disabling illness shown in the studies) about 130,000,000 cases of disabling illness each year, and if non-disabling illnesses be added the figures would be more than doubled.

The loss of time from sickness for the wage-earning groups studied averaged seven days per year. Where women only were employed, the average was eight days per year. School children lose 170,000,000 days per year, or about seven days of the 180 in school each year. These two groups are estimated as about one-half the population.

The average day of hospital residence (other than those for mental and nervous disorders, which house 350,000 each day) was found to be 700,000. The report further states that one person out of every hun-

dred places himself under the care of a physician for the treatment of syphilis or gonorrhea; that there are 700,000 persons constantly with tuberculosis, 10,000 with pernicious anaemia, 110,000 addicted to narcotic drugs. Every year there are over 1,000,000 cases of malaria in the United States.

As to physical defects, the report states that the Life Extension Institute reports over 100,000 adult males in the prime of life showing 27 per cent with uncorrected defective vision, 13 per cent defective hearing, 45 per cent show seriously abnormal tonsils, 39 per cent heavy dentistry, and 39 per cent more in need of definite dental treatment; 12 per cent show heart affections, 32 per cent show blood vessel disturbances of some kind, 16 per cent frequent colds, 34 per cent constipation, 13 per cent hemorrhoids, 22 per cent albumin in urine, 13 per cent pus in urine, and 7 per cent sugar in urine.

Among school and pre-school children from 65 to 95 per cent had one or more physical defects. Estimates place the mentally defective at over 900,000, the blind at 100,000, and the number of school children wholly or partly deaf at 3,000,000.

These figures should challenge the medical profession to a greater degree perhaps than any other, but bring clearly and forcefully to mind the necessity of a reorganization of nursing service on a visiting basis, where the services of the nurse may be secured in the early incidence of disease for the short periods necessary, and if medical service could be extended to a greater percentage of these wage-earning and school groups it would incidentally be extended to the other members of the family. The visiting nurse extends the use of medical service because she does not make a second visit to the family without a physician being in charge of the patient.

What are some of the pressing problems of the nursing profession?

1.—The greatest is unemployment of special duty nurses. From the standpoint of supply and demand there are too many nurses, though if we consider the sickness need for nurses there are not enough. How to increase the use of nurses for those who need them but cannot afford to employ them on the present basis of the organization and distribution of their services, and how nurses may

\*Read before the House of Delegates of the Medical Association of Georgia, Augusta, Ga., May 13, 1930.

use their time to better advantage for themselves and for the sick, should be one of the first concerns of all three groups associated in service to the patient.

2.—There is dissatisfaction with the method of employment of special duty nurses. Nursing by the day or by the night, time service seems the only kind available to the nurse who desires to specialize in bedside nursing of the patient

We need to experiment in other methods. General floor duty is now being carried on in most hospitals, but largely by students. To extend this in the special or private duty field, an increasing number of hospitals are using what is known as group nursing, or one graduate nurse for several patients; the average ratio is one to four.

St. Mary's Hospital, Rochester, Minn., has been providing group nursing for patients for ten years successfully under the organization of the hospital staff and furnishing to the patient one-fourth or one-third or one-half or all of the nurse's time. The patient pays in accordance with his needs. At Ann Arbor, Mich., and a few other hospitals the patient is told that his room charge does not include nursing, and pays for his nursing as for all the hospital facilities—for what he uses. West Suburban Hospital, Oak Park, Ill., also has successfully used this method.

Once the patient has an intelligent grasp of the situation he is agreeable to it. Perhaps the physician would be, too, if it were put to him and his patient by the hospital, the registry, and the nurse herself. Heretofore hospitals have included floor nursing in the cost of the room and board of the patient. If the patient has two special nurses, is the floor nursing service cost deducted? No, he has paid the same nursing overhead charge. In other words he is paying to give other patients more of the student or floor nurses' time if they are short in nursing service, and if they have ample he is paying for economic wastes.

Miss Geister says such organization would mean:

1.—Organization by the hospital of its own graduate nursing service with a reserve staff for peak loads of illness and for emergencies.

2.—The hospital free to select its own staff and set its own standards of work would be responsible for the service.

3.—The nursing service would be distributed to the patients in the quantity and quality the physician feels necessary for his patient—one nurse to two, three or four patients, and at times one nurse to one patient.

4.—The nurse employed by the hospital could be assured regular employment and a reasonably shorter day than appears possible under present circumstances.

The methods of extending the services of the graduate nurse by general floor nursing or by group nursing would utilize the whole of the nurse's time while she is on duty and do away with the economic loss resulting from resident nursing and the degenerating influences of special duty as it is now being carried on.

3.—Many nurses now in the field are not suited to the life and service of nursing, and more careful selection of students is urged.

Not infrequently but two factors have been considered in the selection of the student—an application and a vacancy. We urge that wherever a training school exists that a committee of the board review the applications with the superintendent of nurses, and that only such nurse students be retained after the four months' probationary period as are suited to nursing. We learn of students who have kleptomaniac tendencies, who are untruthful, or immoral, and are dismissed from one school, only to be recommended to another by board members and staff physicians. If more careful selections of students were made these conditions would occur very infrequently.

4.—The changing methods of diagnosis and treatment and specialization in medicine give less bedside instruction to the nurse, therefore more supervision is necessary. This is not recognized sufficiently by hospital authorities and physicians, though the results are recognized in the poor nursing of many of our graduate nurses.

The lack of permanency in instruction and supervision of students in our schools of nursing is an outstanding defect of the system. The hospital politically administered or privately controlled cuts out supervisors and



instructors from the budget at will. Two of the leading hospitals of the state have in the last few months scrapped the nursing educational program of several years, arbitrarily. The authorities chose a superintendent of nurses with no experience, dismissed the supervisors, cut down the payroll something like \$500 or \$1,000 per month, with no apology or explanation to the sixty or seventy student nurses who are expected to accept the situation as a matter of course and believe that it will not affect their educational standards.

How can our schools of nursing be safeguarded from such disasters? How would your organization deal with the problem if the Medical Department of the University of Georgia were to abolish its professorship in obstetrics or pediatrics? And yet that is what is being done in schools of nursing constantly. It is not uncommon to fail to provide systematic class instruction in the fundamental branches of nursing by competent nurse instructors — and even practice is wanting.

5.—The need of developing the case study method which will put the interest and enthusiasm into nursing which it lacks in so many instances. This, however, calls for supervisors of a teaching order who can show the students how to develop the studies of their cases.

6.—Georgia nurse students must have increased experience in pediatrics. The Georgia State Nurses Association and the Board of Examiners place upon the physicians of the Medical Association of Georgia, and the Georgia Pediatric Association the responsibility of increasing the children's services of our hospitals.

Our nurses need experience in the care of mental disorders and contagious diseases. Training in these specialties can only come by securing sufficient appropriations to our state institutions for tuberculosis and mental diseases so that accommodations and instruction can be organized for affiliated students from our general hospitals on at least an elective basis.

We ask your assistance and endorsement to this end.

*We hope very much that your Hospital Committee will endorse the extension of group nursing and general floor nursing by graduates, as well as the extension of visiting nursing for private patients, increasing the use of graduate nursing service in hospitals and homes, eliminating wastes in nursing time, and reducing the costs of nursing to patients, without reducing the remuneration to nurses.*

Why could we not have joint meetings of the Hospital Committee of this Association and the Advisory Committee of the Georgia State Nurses Association and a similar committee from the Hospital Association to consider the working out of a definite plan to be recommended to hospitals, physicians, and nurses, for adoption?

#### PROCEEDINGS OF THE HOUSE OF DELEGATES OF THE MEDICAL ASSOCIATION OF GEORGIA

*First Meeting*

*Tuesday, May, 13, 1930*

The House of Delegates was called to order at the George Walton Apartments, Augusta, Georgia, at 3:00 p. m., by the President, Dr. William R. Dancy, Savannah.

#### *Roll Call*

The Secretary stated that he held in his hand the signed roll of the following thirty-eight Delegates and Councilors, and moved that this constitute the roll call for this meeting:

Wallace Bazemore, Bibb County.  
M. M. Head, Councilor 6th District.  
E. C. Thrash, Councilor 5th District.  
C. H. Richardson, Jr., First Vice-President.  
G. H. Lang, Chatham County.  
S. T. R. Revell, Jefferson County.  
Ralston Lattimore, Savannah (Ex-President).  
D. H. Garrison, Cherokee County.  
B. H. Clifton, Fulton County.  
R. L. Miller, Waynesboro.  
M. A. Clark, Macon (Parliamentarian).  
C. E. Waits, Fulton County.  
J. W. Palmer, Ailey (Ex-President).  
W. A. Selman, Fulton County.  
E. C. McCurdy, Randolph County.  
D. M. Bradley, Ware County.  
W. A. Mulherin, Augusta (Ex-President).  
William H. Myers, Councilor 1st District.  
M. T. Harrison, Fulton County.  
J. G. Dean, Terrell County.  
C. K. Sharp, Tri-County, Ex-President.  
E. S. Peacock, Washington County.  
W. R. Lowe, Burke County.  
Hyland F. Bent, Burke County.  
C. L. Ayers, Councilor 9th District.

R. V. Martin, Chatham County.  
 R. F. Wheat, Decatur-Seminole Counties.  
 E. C. Smith, Decatur-Seminole Counties.  
 T. F. Abercrombie, Atlanta, State Health Officer.  
 Hal M. Davison, Fulton County.  
 C. W. Roberts, Fulton County.  
 G. Y. Moore, Cuthbert (President-Elect).  
 L. P. Holmes, Richmond County.  
 J. T. Floyd, Fulton County.  
 H. G. Ansley, DeKalb County.  
 J. W. Stanford, Chattooga County.  
 J. H. Dees, Montgomery County.  
 President Dancy and Secretary Bunce.

The motion to accept the roll call was regularly seconded and carried and President Dancy declared the House of Delegates duly constituted for the transaction of business.

#### *Reports of Officers*

*President's Report:* Dr. Dancy requested the First Vice-President, C. H. Richardson, Jr., to take the chair while he presented the following annual report of the President:

(Report published in the May issue of Journal, page 189).

The President then resumed the chair.

*Report of President-Elect:* Dr. G. Y. Moore presented the following report:

(Report published in the May issue of Journal, page 194).

*Report of First Vice-President:* Dr. C. R. Richardson, Jr., presented the following report:

#### *Report of the First Vice-President*

The year which has just passed has placed the usual onerous duties upon the First Vice-President. He has been at all times ready to respond to any call that has been made upon his services. Fortunately, these calls have been few; and since he has had very little to do, he can truthfully report that insofar as he knows, he has fulfilled the duties of the office.

CHAS. H. RICHARDSON, JR., M.D.

*Report of Second Vice-President:* Dr. Grady N. Coker presented the following report:

#### *Report of Second Vice-President*

During the past year I have had the honor of being a Second Vice-President in our Association, and I am very grateful for that honor. Vice-Presidents are supposed to see everything, hear a lot, and not say much unless called upon to do so. I have been called upon to make a written report of my activities, or observations, while serving in this office, so I will now endeavor to do so. My activities have been practically nil, since we have three other very much alive superior officers. So my report will be mostly recommendations of things I have observed.

There are quite a few things that we as members of an organized Medical Association should attempt to remedy in our grand old Empire State of Georgia. The Medical Association of Georgia is holding its meet-

ing today, and several very important things are being discussed before that body.

First: Hospitals throughout the state are taking care of quite a few emergencies, charity patients, and also patients that are not emergencies, with no remuneration whatever. But such cases are thrust upon them without very much defense and not a chance to get away from giving medical and hospital attention. Our hospitals are not bound to take care of charity patients but seem to be supposed to do so without anyone knowing the reason why.

Hotels of our state have a state law to protect them from deadbeats, so our hospitals should be protected in the same manner. It is my opinion that a lot of the small hospitals should be combined into county hospitals and a new law drafted in order to help them support their charity patients. The present law does not allow a county commissioner to donate funds to a hospital for charitable purposes.

Second: Our hospital committee of our Association should grade all the hospitals in the state. All of our laboratories in the state should be graded. The hospital committee should aid in passing rules and regulations in regard to grading these two institutions.

Third: The Workman's Compensation law of our state should be amended in order to take care of surgeons and hospitals alike. As you know, under the present law hospital services and services of a surgeon are limited to one hundred dollars, and treatment which the insurance company is bound to pay for, is limited to thirty days. Lots of our industrial insurance cases are compound fractures or such other major injuries that it requires several weeks or months to get maximum results. There is no reason why any member of this Association or any hospital of this state should have such limitation thrust upon them. This law should be amended or the medical man should absolutely refuse to take care of such cases. Some of the insurance companies have been good enough in the cases that we have treated, to O. K. further bills in the treatment of such cases beyond their legal limitations. Others are hard boiled and abide by the law (which is their privilege) regardless of result patient gets. The result is that the surgeon loses his case at times to a company doctor who in most cases charges the insurance company even more than continued treatment would cost.

Fourth: In regard to automobile accident cases, these are those people who ride all day on Sunday, tear up all their old automobiles, and then do not have anything to pay the hospital or surgeon. Some law should be drafted in regard to taking care of such cases.

Fifth: During the past year I have heard quite a bit of criticism in regard to our state association raising its dues. I think this raise was perfectly justifiable and I do not see but one thing wrong with it, it wasn't quite enough. The loyal members of our association should help educate other members in regard to this matter. As you well remember on our last few efforts at medical legislation we were tabued and made almost a complete failure. There is only one reason

for this: we have not been financially able to employ full time lobbyist to take care of our new laws drafted when being presented before a meeting of our State Legislature. It is hard to say but true that our present state government seems to be a hot boiling pot of politics, graft and corrupt. About the only way to get any sane law passed is to put on enough lobbyist and feed them all mighty dollars to buy its way through.

Our State Journal is one of the best in the country. I was in Washington four years ago and a very prominent surgeon of that city complimented us highly on our State Medical Journal.

State tubercular patients should be taken care of by the different hospitals in different sections of the state, while waiting for admission to the state sanitarium. It would be cheaper for the state to take care of these patients in that way than for them to have to wait on a long waiting list and then have to remain longer in our state sanitarium. Of course, I mean that this should be under the regulation of the Superintendent of our State Tubercular Sanitarium. Long waiting for hospitalization does incurable damages to tubercular patients. A few months early treatment would improve and probably cure quite a few more of these patients.

Our public health work is to be commended. All counties in the state should have a full time public health nurse and physician. The country doctors of our state are decreasing each year. Preventive medicine will decrease the work of those that remain and be a greater help to the education and physical condition of the people of our state.

Gentlemen, I appreciate your loyalty during the past year and I am always ready to serve our state association in whatever capacity that I am asked to do so.

Respectfully,  
GRADY N. COKER, M.D.

#### *Report of Parliamentarian*

DR. M. A. CLARK: I cannot refrain from saying that I was greatly disappointed at the last session of the association, for it seemed that the efforts of your parliamentarian had been in vain. Since I have served the association in this capacity I have made it a rule to sit down after each of our annual sessions and review the situation, and last year I was greatly disappointed in the conduct of the House of Delegates. Our Constitution and By-Laws provide that all essayists may have fifteen minutes for the reading of their papers, the discussers five minutes, and the essayists five minutes for closing. Our By-Laws do not provide for the deliberations of the House of Delegates, but Roberts' Rules of Order apply to all such bodies. Last year some members of the house spoke eleven times, some seven times and some five times to the same motion, when they should speak but twice. If this is to be allowed some one should move that the House of Delegates go into committee of the whole for informal discussion.

It should be so managed that the House of Delegates finishes its business on Tuesday to allow the

members to take part in the scientific programs. The time of the meetings of the house should not be taken up with tests of the ability of the parliamentarian to serve. If anyone doubts his ability that should be taken up with him privately. If at any time the body should try to delay matters the chair can make the ruling.

It is the hope of your parliamentarian that in the few years he has to live he may make such an impression on the association that it will be said of him in future years "The spirit of Clark still hovers 'round.'"

*Report of Secretary-Treasurer:* Dr. Allen H. Bunce presented the following report:

#### *Report of Secretary-Treasurer*

To the members of the House of Delegates of the Medical Association of Georgia:

I herewith submit my official report as Secretary-Treasurer for the fiscal year—May 1, 1929 to April 30, 1930.

#### *Membership*

The total paid membership on May 1, 1930, was 1,337 as compared with 1,323 on May 1, 1929—an increase of 14 members. This increase has taken place notwithstanding the increase in dues. Furthermore, our records show that our members in the smaller societies have paid up more promptly than those in the more populous areas. Today we have a total of 1,473 members.

The gradual growth of the association through securing as members a larger percentage of those eligible is shown by the following figures:

Total membership, December 31, 1926.....	1,700
Total membership, December 31, 1927.....	1,744
Total membership, December 31, 1928.....	1,807
Total membership, December 31, 1929.....	1,836

I mentioned "greater percentage" of those eligible because there has been a considerable actual decrease in the number of physicians in the State during these years.

During the year we have lost twenty members by death. We have also recorded the deaths of thirty non-members.

#### *Constituent Societies*

On May 1, 1930, we had, in good standing, ninety-four constituent societies as compared with eighty-eight on May 1, 1929. However, we had a decrease in our honor roll. Several years ago we began placing societies on the honor roll when they had secured all eligible physicians as members.

On May 1, 1926, we had ten societies on this honor roll; on May 1, 1927, thirteen; on May 1, 1928, eighteen; on May 1, 1930, ten. This shows an increasing interest on the part of the constituent societies in securing all eligible physicians as members.

Meetings have been held in every district and in several of the districts two meetings have been held.

#### *The Journal*

During this year THE JOURNAL has contained a total of 888 pages at a total cost of printing and mailing of \$5.184.15 as compared with 904 pages at a cost



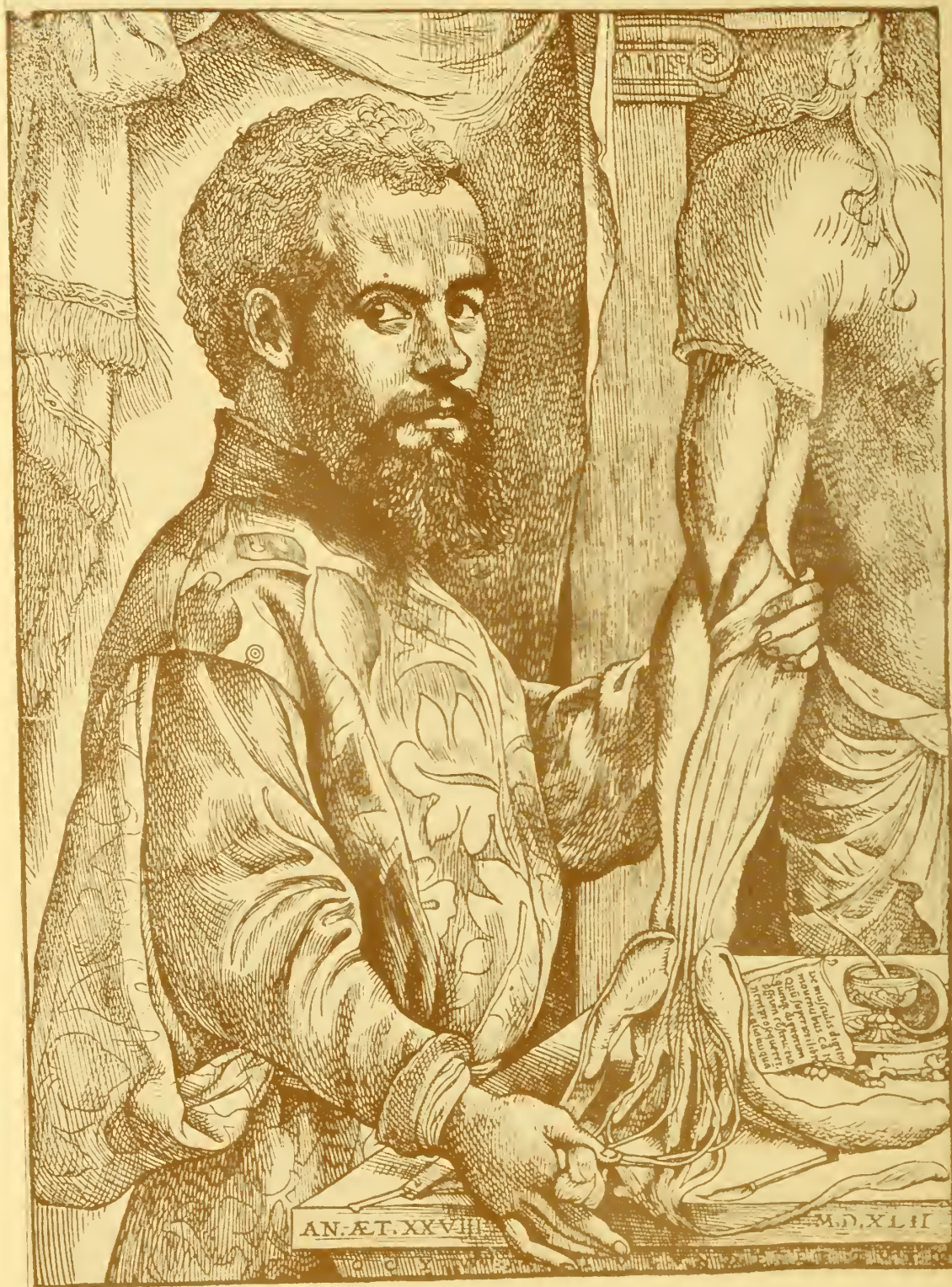


BASILEAE.

Title page. Vesalius, *De Humani Corporis Fabrica*, 1543.



ANDREAE VESALII.

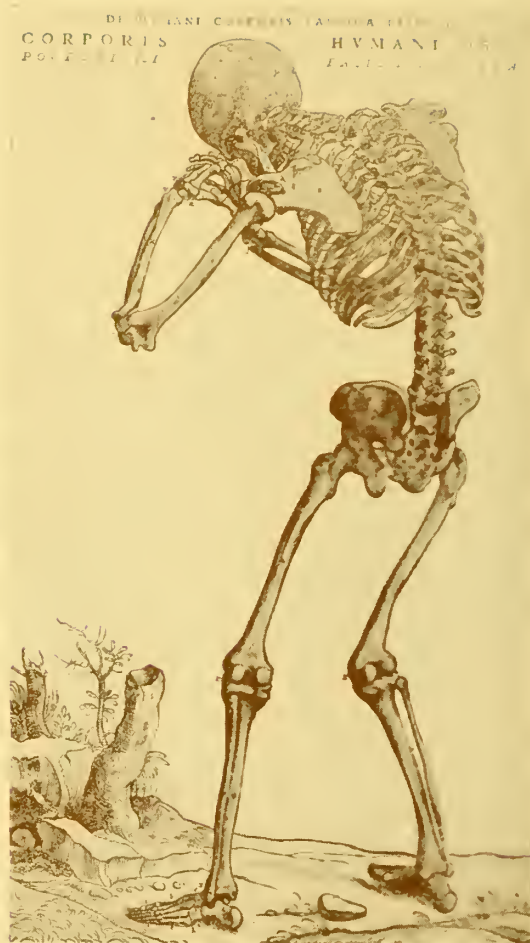
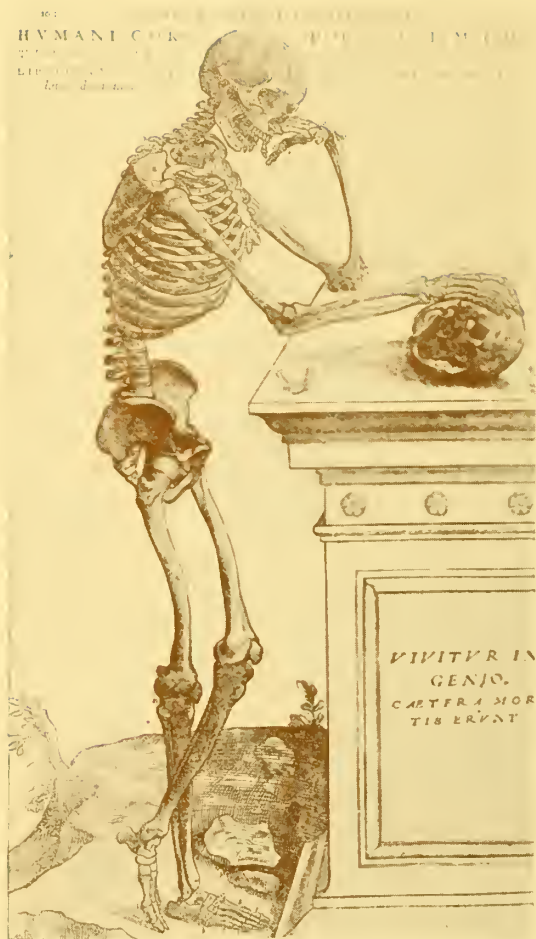


Andreas Vesalius. 1514-1564.



*"It is a special work of the genius of Vesalius that he succeeded in portraying the muscles as if in the state of contraction required to produce the particular position given to the figures, and the skeletons suggest life and movement."—Tye.*





"One skeleton is deep in the contemplation of a human skull: the second has his back turned, his spine is bowed forward, and his forehead is resting on his clasped hands. His whole attitude suggests deep grief."—Tye.

of \$5,702.58 last year. Its income from advertising showed a decrease of \$453.76—being \$5,196.61 last year and only \$4,742.87 this year. Our advertising has been strictly limited to those products accepted by the Council on Pharmacy and Chemistry of the American Medical Association.

In figuring the profit and loss on the Journal we have credited it with the regular subscription of three dollars per paid member, independent subscriptions by non-members at three dollars each and advertising. We have charged to the Journal account the total cost of printing and mailing the Journal, one-half the general postage account, one-half the rent, salaries and all other general expenses of the office of the association. After all of this was deducted we had left a profit of \$1,865.59 in the Journal account for this year.

In view of the above facts I again recommend that, as soon as possible, the Journal be given a separate account and be allowed to use its surplus for improvement and enlargement.

#### *Financial Report*

All bills due are paid.	
Balance in Bank May 1, 1930.....	\$ 5,193.13
Balance in Bank May 1, 1929.....	3,667.47
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Increase in bank balance.....	1,525.66
Gross income 1929-1930.....	\$16,742.77
Gross income 1928-1929.....	15,152.33
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Increase in income 1929-1930.....	\$ 1,590.44
Gross expenditures 1929-1930.....	\$15,217.11
Gross expenditures 1928-1929.....	15,205.43
<hr/>	
Increase in expenditures 1929-1930.....	\$ 11.68

Thus, through strict economy, our expenditures during this year have been kept at practically the same level as last year.

#### *Recommendations*

1. A modern system of bookkeeping should be installed in the central office. The reasons for this are self-evident.

2. The books and accounts of the Secretary-Treasurer should be audited annually by a Certified Public Accountant.

3. All officers and employees of the association who handle any of its funds should be placed under bond.

Respectfully submitted,

ALLEN H. BUNCE, M.D.,

Secretary-Treasurer.

#### *Report of Council*

DR. M. M. HEAD, Chairman, presented the following report:

Mr. President, Fellow Members of the House of Delegates:

It has been a pleasure to see how well the Councilors have worked during the last year. There has not been anything that I have asked them to do that they did not do.

The Medical Association of Georgia had more paid members May, 1930, than they had May, 1929, showing an increase of 14 paid members. The paid members to date for 1930, 1,473.

During the past year we have had only one meeting of the Council, which was quite lengthy, and I feel sure that the Council should not meet less than twice each year.

Respectfully submitted.

M. M. HEAD,

Chairman of Councilors.

DR. W. H. MYERS: I move that we accept the report of the Council.

Motion seconded and unanimously carried.

#### REPORTS OF COMMITTEES

##### *Report of Committee on Scientific Work*

The Committee on Scientific Work for the annual session of 1930 of the association held its first meeting in Milledgeville in November, during the meeting of the Tenth District Association, which was in session at the time.

Those present were Doctors William R. Dancy, President; G. Y. Moore, President-Elect; Allen H. Bunce, Secretary and Treasurer, and C. H. Richardson, Jr., Chairman of the Committee.

At this meeting, rules and regulations were proposed and adopted for the Scientific Program for the coming meeting in Augusta in May.

The next meeting of the committee was held at the office of the chairman in Macon on March 15, 1930, and those present were: Doctors William R. Dancy, President; C. W. Roberts, Allen H. Bunce, C. H. Richardson, Jr., Chairman, and Doctor W. A. Mulherin, representing the local Committee on Arrangements of Augusta, Georgia. At this time and meeting, the papers which go to make up the scientific program were selected and especial effort was made to allot to each district its proper quota. As some districts were not represented by titles at all, certain men in those districts were selected and requested to furnish papers for the coming program.

The work of the committee was finally completed a few days later in Atlanta, and its final report is the program which we have to offer for the coming meeting.

C. H. RICHARDSON, JR., M.D.,

Chairman.

Dr. Thrash moved the adoption of this report.

Motion seconded and unanimously carried.

DR. C. A. WAITS: It is not my work that has accomplished so much, or that of Dr. Bunce. The great majority of the credit for what was done in this work should go to the State Board of Health, and I move that this body extend to the State Board of Health a vote of thanks for their cooperation in relation to Health Education Week.

Motion seconded by Dr. Myers and unanimously carried.

##### *Committee on Medical Defense*

DR. M. A. CLARK, Chairman. There is very little to report this year, for everything has been going

along very well. At the first report of this committee we had some thirty cases to report on; this year we have only ten cases and I feel that they will all be settled satisfactorily.

I wish to remind the surgeons to be very careful to secure the consent of each patient, or of the patient's guardians, before they undertake any operation, in order to comply with the law. This will avoid a great deal of difficulty and unpleasantness.

Our association is very fortunate in its lawyers. They have our interests at heart and are handling all cases very satisfactorily. I wish to remind you again that if any difficulty arises instead of writing to the attorneys directly you should write to the secretary, and must not employ any local counsel. Some of our expenses have been a little more than they should be by reason of the local counsel being a little exorbitant in their charges.

I would request for the Committee on Medical Defense the same appropriation for the next year that has been the custom heretofore, \$3,000 to \$3,500. It has had a wonderful effect on suits in Georgia that the Medical Association of Georgia is behind the doctors. Many lawyers have refused, when they have learned this, to take suits against physicians, and many suits have been settled in an entirely friendly way. I can heartily endorse the work of this committee.

THE PRESIDENT: This report is automatically referred to the Council, as an appropriation is requested.

#### *Committee on Hospitals*

In the absence of Dr. C. S. Lentz, Chairman, this report was given by Dr. Grady N. Coker, Secretary.

DR. COKER: Dr. Lentz is unable to be present this afternoon because of the State Hospital Association having a meeting at present, and we hope that as many members of the Association as possible will attend.

The time of this committee during the past two years has been taken up in organizing the Hospital Association for the better promotion of the work, grading of hospitals, and so on, and later we hope to regulate the different laboratories, and perhaps later on assist in regulating our nursing training schools. On the whole, we have had a very successful year.

#### *Georgia State Nurses Association*

Miss Jane Van de Vrede submitted the following report:

(Report published in this issue of THE JOURNAL, page 332.)

Dr. M. A. Clark moved that this report be referred to the Hospital Committee. Motion seconded and was carried.

#### *Committee on Necrology*

Dr. R. L. Miller, Waynesboro, presented the following report:

Each year as we look over the role of our members and note the number being caught out of our vision into the great beyond we are reminded afresh that man is a pilgrim and stranger on earth.

We are here today; we are gone tomorrow, and other hands must take up our work. When our friends depart we are touched to tenderness and tears, but not to unconsolable sorrow and grief and much less to despair. Since our last meeting twenty of our members have been gathered into the homeland. We pause to thank God for their lives and for their manifold good deeds and to declare our unshaken faith in immortality and the conviction of the certainty of life beyond the grave. They have gone out from us through the low green door to the far, far country where they have been welcomed by friends and loved ones who have gone on before. Some have passed from us in the heat of battle, some when the staff on which they leaned failed as they walked toward the Western sun, some when the end came suddenly and unexpectedly while it was morning and the roses of life were still washed in dew.

We append a list of those who now live in the rich temple of deathless memorials:

Allen, Henry Dawson, Milledgeville.  
Byrd, Harvey Otis, Atlanta.  
Cheney, R. Lee, Shellman.  
Coleman, Edward T., Graymont.  
Craig, Newton, Atlanta.  
Davis, William Lee, Albany.  
Head, J. M., Zebulon.  
Hinton, Chalmers, Lawrenceville.  
Holcombe, Thomas Lorenzo, Jefferson.  
Johnson, Benjamin F., Garfield.  
Kinard, Joseph O., Atlanta.  
Ricketson, George W., Broxton.  
Russell, Edward A., Fitzgerald.  
Spears, Thomas A., Atlanta.  
Spivey, Oscar Smith, Macon.  
Temples, Andrew, Statesboro.  
Tye, Clarence Oscar, Edison.  
Usher, Sheddie, Savannah.  
Walker, John L., Waycross.  
White, John Bonar, Atlanta.

Respectfully submitted,

R. L. MILLER, M.D., *Chairman*.

M. HINES ROBERTS, M.D.

J. R. BRODERICK, M.D.

On motion, regularly seconded and carried, this report was accepted as read.

#### *Cancer Commission*

DR. J. L. CAMPBELL, Atlanta, Chairman, presented the following report:

This Commission has functioned for twelve years and has received appropriations only on two occasions. Aside from that we have paid all the expenses for clerical work, postage, etc. Now as the Association is unable to give the Commission an allowance I want to ask that it be abolished, for it is not wise to have a commission or committee that does not properly function, which we cannot do without money. When we consider that cancer has assumed the second place among the five chief causes of death in the United States. I believe that the Association should either abolish its Cancer Commission or appropriate suffi-



cient funds for it to function properly as an educational unit of the organization.

Respectfully submitted,

J. L. CAMPBELL, M.D., *Chairman*.

On motion, regularly seconded and carried, this report was accepted as read, and referred to the Council.

THE PRESIDENT: I may state that I took it upon myself to investigate the Coffey-Humber treatment and published a brief report of it in the newspapers. I take this as a duty of the President of your Association when occasion arises.

#### *Committee on History*

DR. E. C. THRASH, Atlanta, Chairman, gave a resume of the appointment of the Committee on Medical History of Georgia and of the sub-committee, which was given the privilege of doing all they wished to do in reference to preparing such a history, but no funds with which to carry on the work. He stated that the committee had gone into the entire situation, had secured a large amount of material, and had much interesting data ready for a historian to compile.

Doctor Thrash further stated that a historian had offered to compile all of the data, do the research work, and write the history for the small sum of \$1,000, and that at the last meeting of this committee a resolution was passed that subscriptions for the volume at \$10 each be secured so that the work of compilation could be begun. Doctor Thrash requested all who wished to subscribe to this fund to leave their names with the Secretary.

Doctor Thrash moved the adoption of this report. Motion seconded by Doctor Coker and unanimously carried.

The President expressed the opinion that when the volume came out every member of the Association would want one, and stressed the point that those who subscribed now were only paying in advance for their copy.

#### *Committee on Crawford W. Long Memorial Prize*

DR. WILLIAM R. DANCY, Savannah, Chairman, submitted the following report:

It is well known to you that the Crawford W. Long Memorial Prize is offered by a generous donor for essays on original work of meritorious caliber, the essay being presented at the annual convention of the Medical Association of Georgia, and submitted within two months to the committee in charge.

The committee regrets very much to report that there were no essays offered this year in competition for this prize.

The committee has made special efforts to give this matter publicity and we trust that at the present convention there will be several contestants for this prize.

WILLIAM R. DANCY, M.D., *Chairman*.

GEORGE W. BACHMAN, M.D.

V. P. SYDENSTRICKER, M.D.

STEWART R. ROBERTS, M.D.

R. V. LAMAR, M.D.

On motion, regularly seconded and carried, this report was accepted as read.

#### *Advisory Committee, Woman's Auxiliary*

Secretary Bunce stated that Dr. B. H. Minchew, Chairman, had notified him that he would be unable to be present, but had sent his report and requested him to read it. Doctor Bunce then read the following report:

The membership of this committee, being so widely distributed over the State, has had no opportunity to have a meeting, and the work of each member has been in his own community, and along the general program as outlined by the President of our Association.

The chairman of this committee prepared an editorial for use in THE JOURNAL last September on the Educational Fund which the Woman's Auxiliary has as its chief work.

Our committee has kept in touch with Mrs. Marion T. Benson, President, and Mrs. C. W. Roberts, editor, and have attempted to render all assistance possible. The chairman of this committee had a personal conference with Mrs. Benson and Mrs. Roberts in Atlanta on the 24th day of April, concerning the work of the Auxiliary. Very fine reports were made on the Educational Fund, as well as local activities.

Our committee assisted the Auxiliary in a separate program at the meeting of the Eleventh District Medical Society in Waycross the early part of April. The committee also assisted the Auxiliary to the Ware County Medical Society in raising their portion of the Educational Fund, which has been used through the State organization. We have enjoyed whatever assistance we have rendered the Auxiliary during the year.

Respectfully submitted,

B. H. MINCHEW, M.D., *Chairman*.

The President supplemented this report by stating that the Woman's Auxiliary already had one student at Emory University and that another student was being supported by the Macon branch of the Auxiliary.

On motion, regularly seconded and carried, this report was accepted as read.

#### *Report of Fraternal Delegates*

Secretary Bunce presented the following report from Dr. W. F. Reavis, Delegate to Florida:

In making my report to you of my visit to the Florida Medical Association meeting, May 6th and 7th, I wish first to thank you for having given me this privilege to attend a meeting of the most delightful men, both of the State and of the doctors of Pensacola. They showed me every courtesy and privilege of a regular member and entertainment was furnished gratis.

Due to the geographical location of Pensacola, the meeting was not as largely attended as usual, only about 150 members being present, but these made up for the fewness in number by their enthusiasm in medical work. The invited guest of the Association, Doctor Duval, of New Orleans, gave a most wonderful and instructive lecture. The scientific program

of the meeting was well prepared, well discussed, and well attended.

Entertainment furnished by the Pensacola men was of the highest standard and well diversified so that all visitors could enjoy themselves.

Orlando was selected as the next meeting place, which will be in 1931, and all visitors were assured a hearty welcome and a good time.

Again thanking you for having given me this privilege to attend this meeting, I am

Respectfully,

W. F. REAVIS, M.D.

The Secretary read a telegram from the President of the Florida State Medical Association stating that Dr. Robert F. Godard, of Quincy, would attend the meeting of the Medical Association of Georgia as a Fraternal Delegate.

*Report of Fraternal Delegate to North Carolina State Medical Association*

Dr. Hal M. Davison, Atlanta, presented the following report on his visit to the meeting of the North Carolina Medical Association:

The delegate attended the North Carolina State Medical Association meeting beginning Monday, April 28th, and lasting through Wednesday, April 30th.

The first day was composed entirely of public health association meetings. These meetings were of great interest and largely attended. The State work in this line is exceedingly well organized and much interest is taken in the public health by the general physician. Their problems, in general, appear to be about the same as those which confront us in our own State.

The remainder of their program was divided into general sessions held in the morning and section meetings in the afternoon. The sections are composed of Public Health and Education, Medicine, Eye-Ear-Nose-and-Throat, Gynecology and Obstetrics, Surgery, and Pediatrics. All of these sections were well attended. They had decided to change to two sections only; i.e., Medicine and Surgery, grouping the other branches under these two.

Two of our Atlanta physicians were heard. Dr. Allen H. Bunce addressed the general session, as an invited guest, on the opportunity and responsibility of organized medicine in connection with the so-called high cost of medical care. Dr. Phinzy Calhoun addressed the section on Eye, Ear, Nose, and Throat, as an invited guest of that section on the observation on the formation of macular star in non-renal cases.

The papers given showed evidence of much individual thought, and there were several papers on scientific investigation in various diseases, more, perhaps, than we see in our own society. The question of pellagra was discussed from several angles, and the theory was advanced that pellagra is not entirely a deficiency disease. The program was broad enough to include many of the problems of present interest in medicine. Subjects were well selected, papers were well prepared.

The meeting boasted an attendance of between 650 and 700 members, with a State membership of 2,300. The delegate found nothing to recommend to the society in general as to our own policies from the observation there.

Respectfully submitted,

HAL M. DAVISON, M.D.

*Report of Fraternal Delegate to the Medical Association of the State of Alabama*

Dr. C. K. Sharp, Arlington, presented the following report on his visit to the Alabama State Medical Association:

Your delegate regrets that he was unavoidably prevented from attending the meeting of the Medical Association of the State of Alabama on the first day of its assembly, for on that day the Fraternal Delegates' names were called for introduction, and his absence prevented official extension of greetings from our Association which was somewhat of a disappointment to him as I had formulated a right nice little speech of felicitation and good-will, but arrived on Wednesday, the second day, in plenty of time for the opening of the session after a drive of 158.2 miles.

To make this as short as possible will give a brief synopsis of the impressions gained, after the fashion of O. O. McIntyre. First of all, I want to refer to that same democratic and friendly spirit that pervades the deliberations of our neighboring Association, as is the case in our own.

As a comparison to ours, the officers of the Medical Association of the State of Alabama comprises: A President, Senior Vice-President, and three Junior Vice-Presidents—one for the Southeastern division of the State, one for the Northwestern, and one for the Southwestern division. The Secretary and Treasurer are separate and distinct officials. The standing committees are:

- (1) Scientific Study.
- (2) Mental Hygiene.
- (3) Prevention of Blindness.
- (4) Committee to Meet Druggists.
- (5) Maternal Welfare.
- (6) Infant Welfare.
- (7) Military.
- (8) First Aid.

The morning of the first day was devoted to reports of all these officers and committees after the opening exercises, including a message by the President.

The Board of Censors performs the three-fold duties of censors, State medical examiners, and State Board of Health, all of these under the control of the organized medical profession of Alabama and, to my mind, a most desirable feature.

My impression is that each county has one or more councilors, according to population. They have a seven-year term of office. I see no reference in the program to a House of Delegates.

The Medical Association of the State of Alabama and its organization had its birth in the mind of Dr. Jerome Cochran, a pioneer in preventive medicine,

and its plan has been favorably commented on as a good model by officials of the American Medical Association. Dr. Cochran was the first State health officer and his life and deeds have been commemorated with a lectureship which is delivered annually by some outstanding man. This year this lecture was delivered by Dr. Walter E. Sistrunk, of Dallas, Texas, and his subject was "Anesthesia", referring especially to amylal intravenously. It was described as being a superior anesthetic with but one contraindication, hypertension; two hours before the anesthetic is given, ten grains of chloretone is administered and at the time one-fourth grain of morphine is given.

Another very interesting paper on "Meningococcus Meningitis", by Dr. J. Harold Watkins, of New Orleans, was read; it was strongly indicated in his paper that a persistently low spinal fluid sugar after the administration of serum presaged a fatal issue, while a steady rise made the prognosis more favorable.

Dr. Ralph McBurnay seemed to prove from many and exhausting laboratory experiments that the common cockroach was a transmitter of typhoid fever.

There is quite a movement on foot in Alabama medical circles for a full four-year course in medicine instead of two years, as at present. This was spoken of and advocated by Governor Graves at a banquet given by the Alumni Association of the Alabama University and which I had the pleasure of attending. Dr. Gilbert Douglas, of Birmingham, president of the body, spoke at length and eloquently along the same lines. Dr. Stewart Roberts, of Atlanta, was an invited guest and spoke with his usual grace and presented the alumni with a priceless old volume containing interesting data concerning Alabama men. This gift was highly appreciated.

On Wednesday evening at a session open to the public, Hon. Joseph Lister Hill, member of Congress, delivered a most eloquent address on the life of General William Crawford Gorgas, taking up his life and works in detail; this gifted young man is an orator of the first rank and the son of Montgomery's venerable surgeon, Dr. L. L. Hill. The spirits of General Gorgas and Dr. Jerome Cochran seemed to pervade the whole convention.

Let me mention the presentation of two patients with "Jamaica ginger paralysis", presented by Dr. Seale Harris, Jr. The doctors in the audience were polled and sixty-nine cases were reported in Alabama. The consensus of opinion was that it was a peripheral neuritis due to isopropyl alcohol and that the prognosis was good.

There were thirty-three papers read and discussed.

On Wednesday afternoon a bronze tablet marking the site of the early triumphs of Dr. J. Marion Simms was unveiled. On this spot stood Doctor Simms' office and infirmary and where he did the first successful operation for the cure of vesico-vaginal fistula in 1854, using a pewter spoon for a speculum and silver wire as suture material. Doctor Simms' life history was given by Dr. C. K. Weil, of Montgomery,

and a program of thirty minutes was carried out by the Alabama Anthropological Society.

On Thursday there was an attendance of 507 physicians.

I was treated most cordially by the officers and members and am indebted to our President for a very pleasant and a most profitable time spent with our sister association across the Chattahoochee as his official representative, and feel that an exchange of delegates on such occasions should be encouraged.

Respectfully submitted,

C. K. SHARP, M.D.

#### *Report of Fraternal Delegate to Kentucky State Medical Association*

I attended the meeting of the Kentucky State Medical Association, in Louisville, Ky., October, 1929, and was given a most cordial reception as Fraternal Delegate from the Medical Association of Georgia. I presented my letter of credentials from Doctor Dancy, President of our Association, and extended the greeting of Georgia (the State of Crawford W. Long), to Kentucky (the State of Ephriam McDowell).

The meeting reminded me very much of one of our own State meetings except that the papers were given in sections. A definite period was assigned to the reading of medical papers and another definite period was assigned to the reading of surgical papers. A section chairman presided at the meeting of each section. Your delegate read a paper on "Reducing the Mortality of Acute Intestinal Obstruction" and was elected a lifetime honorary member of the Kentucky State Medical Association.

I invited the organization to send us a Fraternal Delegate and trust we can have one present at the Kentucky State Medical meetings in the future.

Respectfully submitted,

FRANK K. BOLAND, M.D.

The President expressed his appreciation of the splendid reports from these delegates, and on motion, regularly seconded and carried, the reports were accepted as read.

#### UNFINISHED BUSINESS

Secretary Bunce read a letter which he had received from J. C. Wardlaw, Chairman of the Committee on University Extension Work, in which he outlined the plans for a course which he had arranged.

Dr. M. A. Clark moved that the work of this committee be highly commended. Seconded by Doctor Moore and unanimously carried.

#### BY-LAWS, CHAPTER IV, AMENDED

Chapter IV, Section 2, be amended by adding the following: "and shall be ex-officio member of the standing committees, and shall make recommendations at the next annual session." So when amended the second paragraph of Chapter IV, Section 2, will read as follows: "In order to give him an opportunity to become better acquainted with his duties and with the needs of the Association, the President shall be elected one year prior to taking office. During this time he



shall be known as President-Elect and shall be ex-officio member of the standing committees, and shall make recommendations at the next annual session."

Secretary Bunce read the proposed amendments to the by-laws, relating to the duties of the President-Elect, which was presented at the last meeting of the House of Delegates and was now ready to be voted upon.

Dr. C. K. Sharp moved that the amendment be adopted. Motion seconded by Doctor Thrash and unanimously carried.

### NEW BUSINESS

#### *Resolution Reference Committee*

BE IT RESOLVED: That immediately after the convening of the House of Delegates at each annual session the President appoint a Reference Committee, consisting of five delegates, whose duty it shall be to consider all recommendations.

Motion seconded by Dr. E. C. Thrash and unanimously carried.

President Dancy then appointed the following committee for this session: Dr. Ralston Lattimore, Savannah, Chairman; Dr. G. Y. Moore, Cuthbert; Dr. E. C. Thrash, Atlanta; Dr. R. L. Miller, Waynesboro; Dr. Marion T. Benson, Atlanta.

#### *Group Insurance*

Dr. Dan Y. Sage, Atlanta, brought up the matter of group insurance and stated that the Fulton County Medical Society had worked on group insurance for several years and finally had obtained a very satisfactory policy. Since then they had received many offers of group insurance and he thought they now had a policy which would cover all members of the Association, but it would be necessary to make it either a \$3,000 or \$5,000 group.

President Dancy requested Doctor Sage to have this matter placed in written form to be presented at the next meeting of the House of Delegates.

THE PRESIDENT: The matters that have come up at this meeting will be referred immediately to the proper committees, and these committees are requested to consider them at once and report at our meeting this evening. There will be a meeting of the Council immediately after the adjournment of this meeting of the House of Delegates. A motion to adjourn is now in order.

Dr. M. A. Clark, Macon, moved to adjourn until 8:15 p.m.

Motion seconded and the House of Delegates adjourned at 5:50 p.m., to reconvene at 8:15 p.m.

### SECOND MEETING

*Tuesday, May 13, 1930*

The adjourned meeting of the House of Delegates was called to order at 8:15 p.m. by the President, Dr. William R. Dancy, Savannah.

#### *Roll Call*

The Secretary stated that he had the signed roll call of the following twenty-eight delegates and councilors,

and moved that this constitute the roll call for this meeting:

C. E. Waits, Fulton County.  
L. P. Holmes, Richmond County.  
M. M. McCord, Councilor, Seventh District.  
C. L. Ayers, Councilor Ninth District.  
C. A. Greer, Oglethorpe.  
M. M. Head, Councilor Sixth District.  
E. C. Thrash, Councilor Fifth District  
(Ex-President).  
W. A. Mulherin, Richmond (Ex-President).  
Dan Y. Sage, Fulton County.  
H. F. Bent, Burke County.  
R. F. Wheat, Decatur-Seminole Counties.  
Ralston Lattimore, Chatham County.  
M. A. Clark, Macon (Parliamentarian).  
J. W. Palmer, Ailey (Ex-President).  
E. C. McCurdy, Randolph County.  
G. Y. Moore, Randolph County.  
G. H. Lang, Chatham County.  
W. A. Selman, Fulton County.  
D. H. Garrison, Cherokee County.  
D. M. Bradley, Ware County.  
H. I. Reynolds, Clarke County.  
Charles C. Hinton, Bibb County.  
J. T. Floyd, Fulton County.  
C. C. Aven, Fulton County.  
M. T. Harrison, Fulton County.  
S. T. R. Revell, Jefferson County.  
B. H. Clifton, Fulton County.

President Dancy and Secretary Bunce.

The Secretary's motion to accept the roll call was regularly seconded and carried, and the President declared the House of Delegates regularly constituted for the transaction of business.

### REPORTS OF COMMITTEES

#### *Committee on Arrangements*

Dr. W. A. Mulherin, Chairman, Augusta, outlined the plans which had been made for the meetings and for the entertainment of the members of the Association, their wives and friends.

The President thanked Doctor Mulherin, and on motion, regularly seconded and carried, the report was accepted as given.

#### *Reference Committee*

Dr. Ralston Lattimore, Chairman, offered the following report of the committee on the recommendations contained in the report of the President:

1. That a permanent historian be nominated by the Committee on History, or the sub-committee, and be elected in the usual manner, this historian to immediately begin the writing of the late history of the Medical Association of Georgia, starting with the year 1925-1926.

2. That it is not advisable to employ anyone on a salary to secure members for the Medical Association of Georgia.

3. That Health Education Week be inaugurated as an annual procedure.

4. That efforts be made to effect a closer bond between the Medical Association of Georgia and the County and District Societies.

5. That District Societies be urged to have two meetings annually.

6. That the District Societies be urged to have the same dates for their meetings each year and to retain them, when practical, so that a definite schedule can be arranged.

7. That the program each year contain a list of living ex-presidents.

Your committee recommends the adoption of these suggestions.

It was suggested in our committee that there was no special reason why the living ex-presidents should be listed any more than those who have been so honored and have passed on. It was suggested that the word living be omitted and that all ex-presidents be listed, with an asterisk placed after the names of those who are deceased, but on further consideration the committee deemed it unnecessary to print any such list, although we are perfectly open minded regarding that suggestion. We think it would be well to secure a further expression from the President regarding this recommendation.

PRESIDENT DANCY: I had in mind merely following out a plan that many of the fraternal organizations have as a courtesy to these men, so that the other members will know who they are. If we inserted the names of those who have passed away, the list would soon be very long. I think it rather a graceful custom to introduce into our organization, but my feelings will not be hurt in the least if none of these recommendations is adopted.

Dr. E. C. Thrash, Atlanta, moved that this report be read and acted upon section by section.

Motion seconded by Doctor Head and unanimously carried.

Doctor Lattimore then read the above recommendations one by one and the following action was taken:

No. 1. Dr. Head moved the adoption of this recommendation. Motion seconded.

#### CONSTITUTION. ARTICLE IX.

##### PROPOSED AMENDMENT

Dr. M. A. Clark, Macon, called attention to the fact that before this recommendation could be adopted it would be necessary to change Article IX—"Officers"—of the Constitution to include a historian, and gave notice of such an amendment to be acted upon at the next annual meeting of the Association.

THE PRESIDENT: This thought came to me after reading an article in the *Illinois Medical Journal* recently, where they devoted a column to an editorial stating that we had a historian and were preparing a medical history of Georgia, and expressing the opinion that it is an excellent plan to record history while it is in the making. My idea is that the medical history of Georgia is now being prepared and will probably come up to 1925. It seemed to me a good idea to have a permanent historian ap-

pointed to work from that point on, the history not to be published until later.

Dr. M. A. Clark, as Parliamentarian, again pointed out that in order to do this it was necessary to amend the Constitution and that when notice of amendment was given it could not be discussed. That a free discussion of the matter would be in order at the next annual meeting, and any changes could be made at that time which were thought advisable.

No. 2. Doctor Moore moved the adoption of this recommendation. Motion seconded by Doctor Head and carried.

No. 3. Doctor Head moved the adoption of this recommendation. Motion seconded by Doctor Waits and carried.

No. 4. Doctor Selman moved the adoption of this recommendation. Motion seconded by Doctor Thrash and carried.

No. 5. Doctor Selman moved the adoption of this recommendation. Motion seconded by Doctor Sage and carried.

No. 6. Doctor Ayers moved the adoption of this recommendation. Motion seconded by Doctor Head and carried.

No. 7. Doctor Sage moved the adoption of this recommendation. Motion seconded.

Doctor Thrash offered as an amendment that the word "living" be omitted. Motion seconded by Doctor Head and the recommendation, as amended, adopted.

#### *Report of Council*

##### *Appropriations*

DR. M. M. HEAD, Chairman: At the meeting this afternoon the Council recommended that the expenses of our two invited guests be paid by the Association.

Doctor Mulherin moved that the House of Delegates concur in this recommendation. Motion seconded and carried.

DOCTOR HEAD: The Council recommended that because of insufficient funds no appropriation be made to the Cancer Commission at this time.

Doctor Clark moved that the House of Delegates concur in this recommendation. Motion seconded by Doctor Greer and carried.

DOCTOR HEAD: The Council further recommended that the sum of \$500 be appropriated for the use of the Committee on Public Policy and Legislation.

Doctor Sage moved that the House of Delegates concur in this recommendation. Motion seconded by Doctor Selman and carried.

DOCTOR HEAD: The Council also recommended the appropriation of the usual fund of \$3,500 for the use of the Committee on Medical Defense.

Doctor Greer moved that the House of Delegates concur in this recommendation. Motion seconded by Doctor Thrash and carried.

DOCTOR HEAD: At the Council meeting the question of paying the expenses of Fraternal Delegates was also discussed, and it was decided to recom-

mend that these expenses be not paid by the Medical Association of Georgia. It is impossible for the Association to pay all the expenses incurred by its officers and committeemen.

Doctor Dean moved that the House of Delegates concur in this recommendation. Motion seconded by several and carried.

#### *Group Insurance*

Dr. Dan Y. Sage introduced the matter of group insurance, and moved that the President appoint a committee to investigate the feasibility of group insurance for the Association. Motion seconded by Doctor Palmer.

Discussed by Doctors Campbell, Lattimore, Thrash, Sage, and Dean, following which the motion of Doctor Sage was put to a vote and carried.

#### *Committee on Group Insurance*

The President appointed a committee consisting of Dr. J. W. Palmer, Chairman; Dr. R. V. Martin, and Dr. James N. Brawner.

Parliamentarian Clark expressed his pleasure over the conduct of the members of the House of Delegates.

Doctor Moore moved to adjourn. Motion seconded and the House of Delegates adjourned at 9:30 p.m. to reconvene on Thursday at 8:30 a.m.

### THIRD MEETING

*Thursday, May 16, 1930*

The House of Delegates reconvened and was called to order at 8:40 a.m. by the President, Dr. William R. Dancy.

#### *Roll Call*

The Secretary stated that he held the signed roll of the following thirty-two Delegates and Councilors, and moved that this be accepted as the official roll call for this meeting:

M. T. Harrison, Fulton County.  
R. V. Martin, Chatham County.  
D. M. Bradley, Ware County.  
G. L. Echols, Baldwin County.  
E. C. McCurdy, Randolph County.  
B. H. Clifton, Fulton County.  
Dan Y. Sage, Fulton County.  
C. E. Waits, Fulton County.  
J. A. Redfearn, Councilor Second District.  
J. T. Floyd, Fulton County.  
C. H. Richardson, Jr., First Vice-President.  
W. R. Houston, Richmond County.  
K. S. Hunt, Spalding County.  
E. C. Thrash, Councilor Fifth District.  
M. M. Head, Councilor Sixth District.  
M. A. Clark, Parliamentarian.  
J. W. Palmer, Ailey (Ex-President).  
W. H. Myers, Councilor First District.  
A. F. Saunders, Lowndes County.  
C. B. Lord, Jackson County.  
E. C. Smith, Decatur-Seminole Counties.

D. H. Garrison, Cherokee County.

O. W. Roberts, Councilor Fourth District.

M. M. McCord, Councilor Seventh District.

J. G. Dean, Terrell County.

C. K. Sharp, Tri-County.

W. A. Selman, Fulton County.

C. L. Ayers, Councilor Ninth District.

G. Y. Moore, President-Elect.

President Dancy and Secretary Bunce.

The motion of the Secretary to accept the roll call was seconded and regularly carried and the President declared the House of Delegates duly constituted for the transaction of business.

#### *Minutes*

The Secretary read an abstract of the minutes of the meetings of the House of Delegates which were held on May 13th.

Dr. William H. Myers moved the adoption of the minutes. Motion seconded by Dr. J. W. Palmer, and unanimously carried.

### REPORTS OF COMMITTEES

#### *Committee on Public Policy and Legislation*

#### SECTION I

The legislative program referred to this committee at the last annual meeting was disposed of as follows:

Shortly after the legislature convened it was seen that the sentiment against the Basic Science bill was so bitter that it did not seem wise to attempt to force its passage. So with the approval of Council and other officers the bill was withdrawn. Late in the session, however, some proponents of the bill in the House introduced a similar one which was promptly killed in committee.

The bill altering the ratio of members of the State Board of Medical Examiners was introduced, but owing to the fact that its passage would probably have caused some ill feeling between some of our most loyal members, it was thought best to withdraw the measure.

The bill making physicians' testimony privileged was introduced, but not a sufficient amount of sentiment could be aroused for the measure to get a committee hearing. This, however, was partly due to the fact that it was introduced late in the session and to the congestion of the calendar.

A bill limiting obstetrical fees was introduced, but was promptly killed in committee. Two Congressional bills, one concerning vivisection, and second, an amendment to the Harrison Narcotic Act, were opposed through resolutions from the Association and personal communication with our Senators and Representatives in Washington.

During the past three months the committee actively cooperated with the Scientific Committee in carrying out the Health Educational Week, which has just ended. Owing to the fact that we have not received complete reports from all of the counties that participated in the project, a detailed report of this work cannot be given at this time.



A total of 113 counties in the State put on some sort of a health education program; seventy-seven of these named medical chairmen; eighty-three had dental; forty-five had both medical and dental chairmen. On a basis of reports from approximately one-third of the counties taking part in the program, it is estimated that approximately 600 public meetings were held throughout the State, with a possible aggregate attendance of 125,000. Probably more than 100 clinics were held, at which more than 8,000 individuals were examined. Approximately 175 civic clubs were addressed, whose attendance was in the neighborhood of 3,000.

While the program was not a success in a few of the counties, the opinion of the majority of those who participated actively would seem to indicate that the movement was well received in practically every county. A more detailed report of this work will be published just as soon as all reports are received.

## SECTION 2

The committee has no specific recommendations to make concerning legislation. It would probably be useless at this time to devote any further effort towards the passage of a Basic Science bill. Our observation and experience with this measure during the past four years convinces us that a prolonged and very tactful campaign would be necessary to insure its passage. The committee feels that health educational work, such as was done in our recent campaign, would probably yield a much greater good than the Basic Science bill.

The committee recommends, therefore, that some type of health educational campaign be put on by this Association annually. Owing to the fact that we have not had sufficient time to know the exact results obtained in our recent effort, it is impossible to offer specific recommendations for conducting future health programs.

Respectfully submitted,

CHAS. E. WAITS, M.D., *Chairman.*

DR. CHARLES E. WAITS: In regard to the report of Vice-President Coker, which was referred to our committee, it has some reference to the compensation law in Georgia. Your committee feels that this report deserves a good deal of study and will necessitate considerable advice from our attorneys. We believe no specific report should be made at this time.

Doctor Coker makes two other recommendations concerning laws which would protect hospitals in accident cases, and this committee feels that this portion of his report should be referred to the Committee on Hospitals.

DR. M. M. HEAD: I move that the House of Delegates approve the action of the committee regarding this report.

Motion seconded and unanimously carried.

## *Report of Trustees of the Abner Wellborn Calhoun Lectureship Fund*

Your attention is directed to the attached report of Dr. F. K. Boland, Treasurer of the Abner Wellborn Calhoun Lectureship Fund. It will be seen that the total assets at the present time amounts to \$2,275.66. This amount has been contributed during the past three years by the members of this Association and the Calhoun family. The subscriptions so far are inadequate to furnish a net income sufficient to maintain the lectureship upon the high standard that we hope to reach. Through the kindness and generosity of those who have already appeared on our program, only part of their expenses have been defrayed from income received from this fund. We feel that at least \$5,000 is the minimum requirement to establish the lectureship upon the sound financial basis which will be necessary to carry out fully the purposes and ideals of your committee. Your committee feels encouraged and hopeful that within the near future such sum will be in hand.

The committee feels that every member of the Medical Association of Georgia should have a financial and personal interest in building up and adding to this endowment. We believe that any contribution made to such a worthy cause will repay the giver more than a hundred-fold.

The third lecturer to appear on the program is Dr. Frank Lahey, chief of the Lahey Clinic of Boston, Mass., who has chosen for his subject, "Goitre".

Respectfully submitted,

JAMES E. PAULLIN, M.D., *Chairman.*

## *Treasurer's Report*

Following is the financial report of the Abner W. Calhoun Lectureship Fund for the fiscal year 1929-30:

### RECEIPTS

Balance from last year, including subscriptions previously acknowledged, up to May 15, 1929.....	\$1,571.74
Subscriptions, 1929-30:	
F. P. Calhoun family.....	\$600.00
Eye, Ear, Nose, and Throat Club, Med. Ass'n of Ga....	50.00
W. F. Shallenberger .....	50.00
F. G. Hodgson .....	5.00
	705.00
Interest from savings account, one year .....	41.92
Interest on stock in Southwestern Railroad Co.....	37.50
Total Receipts .....	\$2,356.16

### DISBURSEMENTS

Stock invested in Southwestern Railroad Co..	\$1,332.50
Check to Dr. W. S. Baer, lecturer at meeting, 1929 .....	75.00
Stationery, etc. ....	5.50
Total disbursements .....	\$1,413.00

Receipts .....	\$2,356.16
Disbursements .....	1,413.00
Balance .....	\$ 943.16
ASSETS, MAY 10, 1930	
Balance in savings bank, at $3\frac{1}{2}$ per cent interest .....	\$ 943.16
Ten shares stock in Southwestern Railroad Co. at 6 per cent interest .....	1,332.50
Total assets .....	\$2,275.66
Respectfully submitted,	
FRANK K. BOLAND, M.D., <i>Treasurer.</i>	

*Committee on Group Insurance*

Dr. J. W. Palmer, Chairman, presented the following report:

Having met and gone into the subject of group insurance, and finding it more feasible for industrial corporations than for medical associations, and since there are seventeen out of 176 Class A insurance companies that are writing different forms of group insurance, we ask that this committee be continued so that we may investigate and select the company that will give us the most desirable policy. We further request that Dr. Dan Y. Sage and Dr. J. T. Floyd, both of Atlanta, be added to the committee to assist in this work.

J. W. PALMER, M.D., *Chairman.*

R. V. MARTIN, M.D.

J. N. BRAWNER, M.D.

THE PRESIDENT: I shall be glad to add the names suggested by Doctor Palmer to this committee. What is your pleasure about the continuance of the committee?

DR. J. G. DEAN: I move you, sir, that the committee be continued, to report at our next annual meeting.

Motion seconded by Doctor Waits.

DR. M. A. CLARK: I think you all know that I am a strong State's rights man and have always been. If you will study the principles of our organization you will find it is democratic from start to finish. In matters of this kind it seems to me they belong to the county societies and not to the general body. It is all right for us to have group insurance, but it should be settled by the county societies and not by this body. I think it would not be right for our State organization to say that county societies shall have group insurance. I think the committee should consider this in taking up the matter of group insurance.

THE PRESIDENT: I understand that this committee is simply to investigate group insurance and report back to the House of Delegates so that we may decide whether we shall recommend it or not.

DOCTOR THRASH: It is a simple proposition with us. The county societies are too small to have group insurance. They consider that Fulton County is too small to have it. All we need say is that we indorse group insurance for our members, if we can get it.

DOCTOR REVELL: I have been a State's rights man ever since there has been a Democratic party in America. I do not know whether I am in order, but as I understand the question, it is for the purpose of permitting the various component parts of the Medical Association of Georgia to have group insurance. If we ever are to have such insurance it will have to come through the central body. If the committee feels that it will be possible for us to obtain group insurance at a cheaper rate than we could, and without physical examination. It will give many of us an opportunity to get insurance who otherwise could not obtain it.

Doctor Dean's motion to continue this committee was put to a vote and carried.

*Report of Delegates to A. M. A.*

Dr. William H. Myers, Savannah, presented the following report:

We, your delegates to the eightieth annual session of the American Medical Association, held in Portland, Ore., July 8 to 12, 1929, submit the following brief report of the most important measures adopted, but no attempt is made to fully cover all the business transacted.

The House of Delegates convened at 10 a.m., July 8th, and was called to order by the speaker, Dr. F. C. Warnshuis, of Michigan.

The minutes of the seventy-ninth annual session were approved as printed. The annual addresses of the Speaker, the President, and the President-Elect were heard by the House and referred to the Reference Committee on Reports of Officers. Reports of the Board of Trustees, of the Secretary, of the Councils, and of other standing committees were submitted to the House and referred to reference committees.

Dr. William Allen Pusey, delegate from Illinois, presented a resolution providing that the Judicial Council of the Association be asked to present to the House of Delegates at the annual meeting in 1930 a comprehensive statement for the guidance of the American Medical Association concerning the practice of medicine by corporations, by clinics, by philanthropic organizations, by industrial organizations, by demonstrations and by similar organizations, and concerning the relationship of physicians thereto. Doctor Pusey explained that there were two unusual provisions in this resolution: one that it be considered by the House this year, and the other that the House go into executive session. The resolution was adopted. The House went into executive session at 3 p.m. and the Speaker appointed Dr. George A. Leitner, New York, and Dr. Martha Welpton, California, sergeants-at-arms. A heated and general discussion showed the intense concern in this subject. Among those speaking was Doctor Thrash, who strongly advocated a definite stand by the Association, as this matter had been growing in importance for a long time without any policy having been adopted.

Dr. James R. Bloss, delegate from West Virginia, presented a resolution providing that the Council on

Medical Education and Hospitals be asked to investigate the present teaching of obstetrics in the United States, and to seek readjustment of the curriculum so that hours allotted to teaching of obstetrics be equal to those allotted to the teaching of surgery. The Reference Committee on Medical Education recommended the amendment of the resolution as presented by Doctor Bloss that it would provide that the House of Delegates request the Council on Medical Education and Hospitals to investigate the present teaching of obstetrics "and make such recommendations for increasing the clinical teaching hours of obstetrics as the results of its investigations may warrant." On motion of Doctor Mundt, of Illinois, seconded by Doctor Morgan, of Massachusetts, the resolution was referred to the Reference Committee of Medical Education. At a later session this Reference Committee recommended the adoption of the following resolution:

Whereas, The time allotted for the teaching of obstetrics in the curriculums of the several medical schools has been cut down and is inadequate to drill the student thoroughly in this important major, be it

RESOLVED: That the House of Delegates request the Council on Medical Education to investigate the present teaching of obstetrics in this country and make such recommendations for increasing the clinical teaching hours of obstetrics as the results of its investigation may warrant.

The resolution as amended by the Reference Committee was adopted by the House of Delegates.

Dr. E. C. Thrash, of Georgia, Chairman of the Reference Committee on Amendments to the Constitution and By-Laws, proposed the following amendment to the By-Laws: Amend Chapter XIX of the By-Laws by substituting the words "two-thirds" for the words "three-fourths" so as to permit the amendment of the By-Laws of the Association by a two-thirds vote of the House of Delegates. On recommendation of the Reference Committee on Amendments to the Constitution and By-Laws, the proposed amendment was adopted.

Dr. J. C. Litztenbery, delegate from Minnesota, submitted a resolution adopted by the Minnesota State Medical Association, disapproving the policy of the American Red Cross in officially authorizing the Red Cross nurses to nurse patients under the care of cultists. The Reference Committee on Legislation and Public Relations recommended that the American Medical Association disapprove any change in policy by the American Red Cross whereby nurses of that organization would be available for service to patients under care of cultists, and that the Secretary of the Association communicate with the proper officials of the American Red Cross and advise that organization of the attitude of the House of Delegates. The recommendations of the Reference Committee were adopted.

The Judicial Council, in its report to the House of Delegates, recommended that Section 3, Article VI, Chapter II of the Principles of Medical Ethics be amended by substituting the following:

Section 3—When a patient is referred by one physician to another for consultation or for treatment,

whether the physician in charge accompanies the patient or not, it is unethical to give or to receive a commission by whatever term it may be called or under any guise or pretext whatsoever.

This recommendation of the Judicial Council was adopted by the House of Delegates and the Principles of Medical Ethics were amended.

Dr. J. H. J. Upham, member of the Board of Trustees, presented a report from the Woman's Auxiliary to the House of Delegates submitted by the President, Mrs. Allen H. Bunce, of Atlanta, Ga., and this message was accepted by the House and made a part of its records.

The following officers were elected:

President-Elect, William Gerry Morgan, Washington, D. C.

Vice-President, Earnest A. Sommer, Portland, Ore.

Secretary, Olin West, Chicago.

Treasurer, Austin A. Hayden, Chicago.

Speaker of the House of Delegates, F. C. Warnshius, Grand Rapids, Mich.

Vice-Speaker of the House of Delegates, Albert E. Bulson, Fort Wayne, Ind.

Members of the Board of Trustees: D. Chester Brown, Danbury, Conn., and Allen H. Bunce, Atlanta, Ga. (re-elected to succeed E. H. Cary, Dallas, Texas).

A vacancy in the Board of Trustees had occurred and a successor to Dr. E. H. Cary was to be elected. Doctor Thrash, in appropriate language, placed in nomination Dr. Allen H. Bunce to fill this important office. The second was by Myers. Doctor Bunce was elected unanimously.

The President, Dr. M. L. Harris, made the following nominations for standing committees:

Judicial Council—James B. Herrick, Chicago.

Council on Medical Education and Hospitals—M. W. Ireland, Surgeon General, United States Army, and James McLester, Birmingham, Ala.

Council on Scientific Assembly—Lewis H. McKinnie, Colorado Springs, Colo.

These nominations by the President were confirmed by the House of Delegates.

Detroit, Mich., was selected as the place for holding the next annual session of the American Medical Association in 1930.

Respectfully submitted,

ALLEN H. BUNCE, M.D.

WILLIAM H. MYERS, M.D.

ELMORE C. THRASH, M.D.

#### *Report of Council*

Dr. M. M. Head, Chairman, presented the following report:

The Auditing Committee appointed to audit the books of the Secretary-Treasurer has presented the following report:

Augusta, Ga., May 14, 1930.

We, the Auditing Committee, appointed by the Chairman of the Council to audit the books of the Secretary-Treasurer, find that all of the receipts and



disbursements have been itemized and that the accounts are correct.

WILLIAM H. MYERS, *Chairman*.  
J. A. REDFEARN.  
C. L. AYERS.

Doctor Myers moved that this report be adopted.  
Motion seconded and carried.

## NEW BUSINESS

### *Invitation for Next Meeting*

DOCTOR BRAWNER: I presume it is in order to extend an invitation to the Association for the next annual meeting.

The members of the Fulton County Medical Society authorized me to extend to the Medical Association of Georgia a very cordial invitation to meet with us in Atlanta next year. I have the assurance of the Woman's Auxiliary that they will be glad to entertain the ladies.

Doctor Myers moved that the House of Delegates recommend to the general body the acceptance of this invitation. Motion seconded by Doctor Palmer and unanimously carried.

### *Medical History*

DR. D. H. GARRISON: In regard to the Medical History of Georgia, I would like to say that, in as much as the local Society will be looking for a report from their delegate; that each delegate take this opportunity to boost the history of his Society, and raise as many subscriptions to the history as possible; these subscriptions to be paid in to his Secretary-Treasurer; this in turn to be mailed into the State Medical Secretary-Treasurer. By so doing we might to a great extent speed up the history work.

THE PRESIDENT: I think this suggestion is very good and hope that the delegates will all be active in this connection.

DOCTOR THRASH: I thank the gentleman for his suggestion. Our committee will write to the Secretary of each society in the State in regard to this matter, and I think this will be of assistance in collecting the necessary funds.

### *Minutes*

THE SECRETARY: In order to make this meeting official it will be necessary to adopt the minutes of what we did this morning.

I move that we adopt the minutes of our proceedings this morning, as they will appear in THE JOURNAL.

Motion seconded and unanimously carried.

THE CHAIRMAN: Is there anything further to come before the House of Delegates? If not, a motion to adjourn is in order.

On motion of Doctor Head, seconded by Doctor Thrash, the House of Delegates adjourned at 9:30 a.m., *sine die*.

ALLEN H. BUNCE, *Secretary-Treasurer*.

## PSITTACOSIS

Following the appearance of cases in the United States investigation of the disease was started by the Hygienic Laboratory, Washington, D. C. The seven cases reported by Edwin Peterson, O. B. Spalding, and Otis Wildman, Washington, D. C., (*Jour. A.M.A.*, July 19, 1930), represent laboratory infections occurring at this institution during the investigation. It was found that after an incubation period of from eight to ten days the disease begins to manifest itself. The first symptom is usually a chill or sense of chilliness, soon followed by a distinct rise in temperature. Headache may come on during the first day and persist for several days. Perspiration is the rule during the first week of illness. Appetite is commonly lost. The tongue becomes coated early; the center of the tongue may be chalky white and the edges red; the coat sometimes is brownish. Abdominal distention is common, often associated with constipation. The severity of the disease is definitely associated with the degree of lung involvement, which apparently is the determining factor in the development of the toxemia. In these mild cases respiration seldom goes over 24 a minute, and the pulse is definitely below 100, often between 80 and 90 in spite of the fact that the temperature may rise to 103.5 F. In the more severe cases a whole lobe or, indeed, two or more lobes may become involved. In these cases the picture may resemble that of lobar pneumonia with rather rapid breathing, cough and expectoration of rusty sputum. Our cases 1 and 4 would come in this group. Other cases may resemble typhoid. Headache and abdominal distention are important symptoms in the severe cases. Perspiration is a pronounced feature throughout the disease. The spleen could not be palpated in any of the cases. The liver descended from one to two finger-breadths below the costal margin. Relapses do occur. A complete roentgenologic study was made of all the cases in this series. Plates were taken daily, and the progress of the specific creeping pneumonia was carefully noted. The laboratory observations were consistent in all cases with regard to both positive and negative results. An absence of leukocytosis was a feature in all cases. This was associated with a distinct shift to the left of the neutrophils. This shift reached its maximum during the height of the disease and was accompanied by a distinct fall in the number of lymphocytes and absence of eosinophils. With the occurrence of lysis and general improvement, a normal distribution rapidly established itself. In all cases except one an albuminuria was present. Repeated blood cultures were negative in all cases. Cultures of feces and urine have failed to show any pathogenic organisms. The authors feel inclined to agree with those who believe that *Bacillus psittacosis* plays no part in the etiology of parrot fever. Treatment employed has been largely symptomatic coupled with alkalization and forcing of fluids, including orange juice and dextrose. Various enemas were used for abdominal distention. In addition, the last six patients received various amounts of

immune serum. Of the seven patients treated the one who did not receive serum died and the six who received serum recovered. The clinical picture, while characteristic enough, especially when the results of roentgenologic observations are available, is not so strikingly different from commoner conditions as to do more than suggest to the clinician that he is dealing with an unusual disease. No secondary cases developed from contact with patients either at home or in the hospital. This lack of infectiveness of the person sick of psittacosis is in sharp contrast to the extraordinarily high infectiousness for man of infected birds.

## WEATHER THERMOMETER IN THE BLADDER

### CASE REPORT

EARL FLOYD, M.D., J. L. PITTMAN, M.D.  
*Atlanta*

There are many numerous interesting cases reported in literature of foreign bodies in the urinary bladder; such as, nails, hairpins, chewing gum, etc. This case is being reported because of the unique instance of a weather thermometer being found in the bladder.

A case of a boy, W. A. H., 16 years old admitted to the hospital with chief complaint exceedingly painful and difficult urination. Blood in the urine and a thermometer in the bladder.

Family history and past history, essentially negative.

Present illness, patient came in complaining of pain and tenderness over his bladder, frequency and difficult urination due to having passed a weather thermometer into his bladder a few hours before his admission.

Physical examination: Boy 16 years old, fairly comfortable but crying when questioned and would not look directly at you when being questioned.

Head, neck and chest, negative.

Abdomen, there is generalized tenderness over the bladder.

External genitalia, meatus red and swollen, blood tinged urine.

Cystoscopic examination: A No. 21 'scope was passed into the bladder. The bladder mucosa was found to be markedly red throughout and a glass was seen to lie at right angles to the bladder. The endoscope was then passed and an attempt made to dislodge it. But it was found to be stuck into the bladder wall. Not being able to remove the thermometer this way, supra-pubic cystotomy was done and a glass weather thermometer 10 1/2 cm. in length was found piercing the bladder wall. This was removed and patient made an uneventful recovery.

## THE VALUE OF ORGANIZATION\*

E. C. THRASH, M.D.

*Atlanta*

One might have the strength of Hercules, the wisdom of Solomon, the executive ability of Napoleon, the power of the erstwhile Czar, yet with all these, one alone would be as helpless as a jelly fish in the midst of the Sahara Desert, though possessed of the gold of Ophil, the diamonds of South Africa, the pearls of the Orient and the wealth of Croesus. This studied to the last analysis gives one an insight into the value of organization. All that we know, can know, or will ever know, is obtained either directly or indirectly by personal touch with our fellows; and all that we know, can know, or ever will know is worthless unless we continue to possess that touch. Without organization, medicine would have never risen above the necromancy of ancient priests, or the sciences of surgery above the plebotomies of medieval barbers. Whatever attainments a doctor may possess, he has not done his duty until he goes among his comrades, gives them the benefit of what he has accomplished and learns of them what they have to give.

\*Journal of the Medical Association of Georgia, July, 1921.

## URETHRAL ECTOPIC URETER FROM HYDRO-NEPHROTIC HALF OF DOUBLE KIDNEY

Urethral ectopic ureters without incontinence of urine are exceedingly rare. As a source of pyuria and bacteriuria, such ureters may present difficult diagnostic problems. The persistence of pus and bacteria in the urine without an assignable cause should lead to a careful search for an ectopic ureter. The case presented by Edgar G. Ballenger, Omar F. Elder, and Harold P. McDonald, Atlanta, Ga., (*Journal A. M. A.*, July 26, 1930), probably the first to be reported in a male, is illustrative of this condition.

## GASTRIC ACHYLIA

M. H. Streicher, Chicago (*Jour. A.M.A.*, August 2, 1930), says that the neutral red test may be used as an aid in differentiating true and false achylia gastrica, not because the dye is employed in this test, but because a prolonged period is necessary to perform the test. Neutral red tests may be advantageously employed as a test of gastric function, just as any fractional method may be employed over a long period of time (more than sixty minutes). Neutral red possesses little or no property as a stimulant of gastric acidity.

**THE JOURNAL**

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

AUGUST, 1930

## THE CULTURAL SIDE OF MEDICINE

It is interesting to note that in America the systematized study of the cultural side of medicine received its impetus from one of our country's greatest leaders and scholars, Thomas Jefferson.

When Jefferson was organizing the University of Virginia in 1824 it was his desire that the student of medicine should learn something of the earlier history and progress of the art, as well as the usual technical details of a collegiate medical education. It was a wise provision that he thus incorporated with the other features of a didactic course a series of lectures on the history of the progressive steps in the development of medicine.

These lectures were delivered by Robley Dunglison, a young English physician, appointed by Jefferson "to teach to the best of his ability and with due diligence, Anatomy, Surgery, Physiology, Materia Medica, Pharmacy, and the History of the Progress and Theories of Medicine". Such a variety of branches must have sorely taxed the energies of the professor, but it marks the establishment of the first course of lectures in this country on the history of medicine.

Ever since that time the question has arisen every now and then, as to whether the study of the cultural side of medicine has any practical value. This depends entirely upon the point of view. The elaborate designs on the great bronze portals of St. Peters in Rome add nothing to the usefulness of the doors, but how much conscious and unconscious pleasure they give to the thousands who pass over the threshold.

For the most part, the reading of the modern student and practitioner is directed solely towards acquiring the information needed to pass his examinations or to earn his living

successfully. It rarely occurs to him that there can be a fascination about knowledge which serves no immediate practical purpose. His eyes are fixed intently on the ground directly before him, and he has no time, and, alas, for the most part, no inclination, to look around.

There is a class of men, however, to whom books are dear—a small, silent band whom the profane call bibliomaniacs. Loving books partly for their contents and partly for the sake of the authors, they keep alive the sentiment of historical continuity in the profession. They realize that the men who have traveled the path before them and have become great were those who raised their heads and looked about them, who saw a new light and followed it to the discovery of new truths. We need more men of this class in our country and in our community today.

Vesalius carefully observed the teachings and experiments of Galen and recognized the errors in many of them before he began his own original observations on the human body. What makes the study of such a man as Vesalius particularly interesting is, not only his contributions to human knowledge, great as they are, but the personality of the man himself—the short, broad-shouldered Belgian, pushing aside the barber-surgeons, taking the dissecting razor in his own hand, transcribing the results of his observations, quarreling with the artist, Von Kalkar, over the drawings, and journeying to Basle to harass the printer, Oporinus, until the *Fabrica* finally came from the press, a masterpiece of anatomical art and typography. These personal details make the man and his work as live and tangible today as they were in the sixteenth century. They make the history of the development of modern, scientific anatomy as fascinating as any current novel.

Osler says that a single book written by a single person may, like the proverbial pebble cast into the pool, start an ever-widening series of circles in the development of a library. The copy of the first edition of Vesalius' *Fabrica*, recently presented to the Calhoun Medical Library of Emory University, is truly a shining pebble dropped by our good friends into the crystal pool which



reflects the works of the immortals in medicine. The circles emanating from our valued pebble are both an inspiration and an aspiration. They make us dream dreams and see visions. We do not aspire to rival the large medical libraries in the possession of cradle-books, but we are confidently hoping, now that the start has been made, to develop as time goes on, a collection of classics and early treatises which will be an indispensable and priceless asset in the local development of the cultural side of medicine.

M. MYRTLE TYE, *Librarian.*

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### "QUO VADIS?"

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Visits to many of the District and County Medical Societies show that these organizations are doing wonderful work. Their programs are well gotten up and the papers are of a high standard.

Not only have these scientific sessions been of a high type, but the social sides have been refined, interesting, and helpful. We wonder if the larger meetings would not profit by paying a little more attention to the scientific program, and a little less hilarity at the official social functions. The general public is prone to criticise the actions of the men of the professions. Would it not be well for us to be more guarded on such occasions? So much for the attitude for the general public; now as to the attitude of the men of the professions. Let us remember that all do not have the same happy degree of tolerance. All recognize that it would be better to be more circumspect and more careful. These things, coupled with the lack of tolerance by some, should make us wonder "Whither are we drifting?"

ARTHUR G. FORT, M.D.

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### TUBERCULOSIS IN WORKERS AFTER RESIDENCE IN TUBERCULOSIS HOSPITAL

In the follow-up study made by Burgess Gordon and W. M. Cashman, Philadelphia (*Jour. A.M.A.*, May 24, 1930), of 737 present and former workers in a hospital for diseases of the chest, the incidence of tuberculosis acquired after termination of service was found to be low (perhaps less than 2 per cent). Natural immunity and hygienic measures are considered important from the standpoint of prevention. The favorable influence of a high carbohydrate intake is suggested.

### PROGRESS OF THE COMMITTEE IN COMPILING THE HISTORY OF MEDICINE OF GEORGIA

In 1927 the House of Delegates of the Medical Association of Georgia passed a resolution to publish a Medical History. The committee appointed for this purpose consisted of the ex-presidents and present officers. The present officers meant those coming in from year to year.

A meeting of this committee was held on December 7, 1927, at the Academy of Medicine. The writer was made chairman of the General Committee. Resolutions were passed that we begin work immediately, and a sub-committee consisting of E. C. Thrash, chairman; Frank Boland, A. H. Bunce, and M. A. Clark was appointed to proceed immediately with the work and report from time to time to the General Committee. The sub-committee has worked arduously upon this task, and the General Committee was called together in Augusta in May of this year. A report was made that we had collected sufficient data to tentatively engage a Historian and that we were ready to begin compilation of the work. All that has been done up to the present by this committee has been without cost to the Association. The General Committee approved of the work of the sub-committee and arranged with Dr. J. P. Corry, who is a qualified and recognized Historian, to compile the work. The General Committee directed the sub-committee to begin at once to get subscriptions for the volume. All who were present became subscribers. The History will be divided into sections, consisting of:

General History of Medicine in Georgia divided into expedient periods.

A History of the Medical Association of Georgia.

A History of the colleges and other educational movements.

Biographies of distinguished physicians who are not living.

Our plans are now to make an intensive drive for subscriptions at \$10 per volume. There will be a de luxe edition published, and the names of all those who subscribed

before publication will be printed in the volume as patrons of the movement. This will be a book comprehensive of all medical affairs in Georgia and one that each doctor will feel a pride in having in his library.

E. C. THRASH, M.D., *Chairman.*

# HISTORY OF MEDICINE IN GEORGIA—550 pp.

## *Tentative Outline*

Oath of Hippocrates (or Oath and Prayer of Maimonides)

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Contributions to medicine and surgery—20 pp.

Georgia doctors in the Revolution and the War of 1812—10 pp.

Second Period 1828-1865—110 pp.

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Historical sketch of events and conditions—15 pp.

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State Sanitarium

Georgia doctors in wartime—20 pp.

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World War

The Medical Association of Georgia—15 pp.

The future of Georgia Medicine—10 pp.

Part II. Biography—150 pp.

Biographical sketches of 150 Georgia doctors, with photographs of thirty

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List of Presidents of the Medical Association of Georgia

Code of Medical Ethics

Selected alphabetical list of medical publications by Georgia doctors.

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Medical buildings

Apothecaries Garden at Chelsea, London

Apothecaries Hall, London

## PATRONS\*

### HISTORY OF MEDICINE IN GEORGIA

*By The Medical Association of Georgia*

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Aven, C. C., Atlanta

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Bailey, M. K., Atlanta

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 Miller, Hall C., Atlanta  
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 Niles, Geo. M., Atlanta  
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\*This list includes the names of those from whom subscriptions were received to time of going to press. The names of all others who may hereafter subscribe will be included in the list of Patrons and their names published in the history as contributors to the work.

## COUNTY AND DISTRICT SOCIETIES

### COUNTY SOCIETIES

#### 1930 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 5, 1929.
2. Barrow County, Dr. W. L. Mathews, Winder, December 5, 1929.
3. Dougherty County, Dr. I. M. Lucas, Albany, December 28, 1929.
4. Lamar County, Dr. J. M. Rogers, Barnesville, January 6, 1930.
5. Turner County, Dr. J. H. Baxter, Ashburn, February 10, 1930.
6. Monroe County, J. O. Elrod, Forsyth, February 18, 1930.
7. Wayne County, Dr. A. J. Gordon, Jesup, March 20, 1930.
8. Stephens County, Dr. C. L. Ayers, Toccoa, April 2, 1930.
9. Upson County, Dr. R. L. Carter, Thomaston, April 3, 1930.

10. Lowndes County, Dr. Bennett G. Owens, Valdosta, May 5, 1930.

11. Ware County, Dr. W. L. Pomeroy, Waycross, May 21, 1930.

12. Cobb County, Dr. L. L. Welch, Marietta, August 2, 1930.

\*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

### NEW MEMBERS FOR 1930

Gibson, C., Thomson.  
 Hall, J. I., Macon.  
 Josey, J. C., Spartanburg, S. C.  
 Philpot, W. K., Augusta.  
 Power, Robert, Roswell.  
 Tousignant, C., Lewiston, Me.  
 Wasden, C. N., Augusta.

### COMMUNICATIONS

*To the Editor:*

The article by Dr. C. W. Roberts on "The Medical Profession and the Changing Social Order", published in the July number of THE JOURNAL, I found very interesting and instructive. I greatly enjoyed reading it.

The problems facing the nursing profession, if I understand them, constitute an echo of many of those brought out in the article. The economics of sickness is a vital topic of discussion to layman and professional, of current magazines as well as scientific journals.

"How Necessary Is Illness", by Dr. Reynolds in the June number of the Atlantic Monthly, brought forth many comments. The current number carries a letter in the Contributors Columns which would have us believe that higher standards of education for medical students is responsible for the lack of rural practitioners. The counterpart of this is uppermost in many discussions of the economic problems involved in nursing, when nurses attempt to adjust their services to the complex and varying needs of the community.

Doctor Roberts' article has many suggestions which should be carried out by the professions involved rather than for them by others. Study and conference committees of the groups involved would bring some results in the right direction.

Atlanta is to be hostess to the 1931 meeting of the National League of Nursing Education. What more opportune time to begin an attack on some of the pressing problems of distribution and cost of nursing service and especially that most pressing one, the unemployment of graduate nurses.

In the borough of Atlanta, May 31, 1930, there was one registered nurse to every 420 people; the ratio desired is one to every 1,000 of the population. What can be done about it?

J. V., R.N.

Atlanta, July 22, 1930.



## SECURING TESTIMONIALS

We wonder how many of our members (we sincerely hope there was none) "fell for" this "perfumed bait".—ED.

Dear Doctor:

A GIFT WORTH \$10 FOR YOU FOR JUST A LITTLE INFORMATION

Realizing that your time is limited and valuable, we are glad to make you a worthwhile gift in return for the few minutes necessary to answer this letter.

Perhaps it will be easier for you to give us exactly what we want if you simply answer the following questions. Of course, answer only if you have had the experience implied:

If you have ever prescribed yeast in your practice, for what disorders have you used it? What are your results in prescribing yeast for nervousness due to run-down condition; for constipation? Have you ever taken it yourself?

Have you ever prescribed yeast plus iron (to be used together), and for what symptoms? What is your opinion of this combination for increasing the appetite, weight, and as a general tonic?

Simply write your experience on your stationery. If you will do this at once, we will gladly forward to you by return mail a very lovely gift. It is a luxurious flacon of exquisite French perfume—Tout Paris de Guimet regularly sold at \$10.

Naturally we cannot hold this offer open indefinitely, but must limit it. Ask, therefore, that you reply at once.

Thanking you in advance for your kindnesses, we remain,

IRONIZED YEAST COMPANY.

Atlanta, Ga., July 19, 1930.

## DIAGNOSIS AND TREATMENT OF DISEASES AND TUMORS OF BONE

To My Colleagues, the Editors of the Medical Journals of the United States and Canada:

If you receive this in time and it is appropriate, will you publish in your journal that there will be a meeting in the ballroom of Belvedere Hotel in Baltimore, Md., Monday, Tuesday, and Wednesday, September 15, 16 and 17, 1930, beginning Monday morning at 10 o'clock and ending Wednesday evening at 9 o'clock, daylight saving time. During these days there will be lantern-slide demonstrations, with four lanterns and screens, on the Diagnosis and Treatment of Diseases and Tumors of Bone.

The first day will be devoted to the fundamental and essential knowledge of the benign and malignant lesions of bone, such as osteitis fibrosa, giant-cell tumors, osteomyelitis, sarcoma, and so forth. On the second day the subject will be the different diseases of single bones, such as the lower end of the radius, vertebrae, etc. The third day will be reserved for the presentation of rare lesions of bone difficult to diagnose. Any member of the medical profession attend-

ing this meeting may register such a case by addressing Miss Maude Walker, Secretary to Doctor Bloodgood, Surgical Pathological Laboratory, Johns Hopkins Hospital, Baltimore, Md., enclosing the x-ray films or lantern slides of them (if possible the latter) and sections of tissue, if any. Any member of the medical profession interested in the diagnosis and treatment of lesions of bone is invited.

On account of the size of the ballroom the number must be limited to 800.

Those who wish to attend should write the Belvedere Hotel and register, either requesting the usual rates for a single or double room with and without bath, or the special rates for three or more in a room with and without bath, and the special restaurant rates for a club breakfast, luncheon, and dinner. You are advised to bring the answer received from the manager of the Belvedere Hotel with you and present it when you register. For any further details in regard to this demonstration, address your letter to Miss Maude Walker, named above.

I am very anxious that this invitation should reach radiologists, surgeons, pathologists, and internists who are interested in the subject but have only rare opportunities to observe lesions of bone. In three sessions of two or two and one-half hours each, on three days, with four lanterns and a very remarkable and educational motion picture, the subject can be presented in an almost unforgettable way, emphasizing the essentials and fundamentals in the diagnosis and treatment of bone lesions. All cases registered for presentation on Wednesday will be sent later to Dr. Bowman C. Crowell, Director of Clinical Research of the American College of Surgeons, who is Chairman of the Bone Sarcoma Committee. You should become familiar with this registration of sarcoma of bone, if you are not, because you can register all your cases there and receive the diagnosis of a committee, and you can send for groups of bone tumor cases which have been registered, for personal study.

It is impossible, except in the largest clinics, for any radiologist, pathologist, surgeon, or internist to become familiar with the changing clinical, x-ray, and microscopic pictures of diseases and tumors of bone as they come under observation earlier and earlier after the first injury or first symptom, and to learn how to diagnose and treat them in the best way.

JOSEPH C. BLOODGOOD, M.D.,

Johns Hopkins University.

Baltimore, Md., July 20, 1930.

## ARTICLES ACCEPTED

To the Editor:

In addition to the articles enumerated in our letter of June 28th the following have been accepted:

Aces Laboratory, Inc.—

Mercurochrome Suppositories Aces.

Cutter Laboratory—

Diphtheria Toxoid-Cutter, 45 cc. vial.

Hoffman-LaRoche, Inc.—

Synthetic Thyroxine—

Ampules Synthetic Thyroxine-Roche, 1.1 cc.

Solution Synthetic Thyroxine-Roche.

Tablets Synthetic Thyroxine-Roche, 1 mg.

Winthrop Chemical Co.—

Mesuroi—

Ampules Emulsion Mesuroi, 20 per cent, 1 cc.

Theocin—

Tablets Theocin, 1½ grains.

COUNCIL ON PHARMACY AND CHEMISTRY.

Chicago, July 26, 1930.

## TRUTH ABOUT MEDICINES

### *New and Nonofficial Remedies*

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Non-official Remedies:

*Pyridium*.—Phenylazo-2-6-diamino-pyridine monohydrochloride. The monohydrochloride of an azo dye of the pyridine series, phenylazo diamino-pyridine. Pyridium has marked penetrating power and is non-toxic and non-irritant in therapeutic dosage. It is rapidly eliminated through the urinary tract. It is bactericidal in aqueous solution against staphylococcus, streptococcus, gonococcus, *B. coli* and even *B. diphtheriae*. It is proposed for use in gonorrheal infections, urinary diseases, and in colon bacillus and mixed infections. The drug is supplied in the form of Aqueous Solution of Pyridium, 1 per cent; Pyridium Ointment, 10 per cent, and Pyridium Tablets, 0.1 Gm. Merck & Co., Inc., New York.

*Mead's 5 D Cod Liver Oil With Viosterol*.—A brand of cod liver oil with viosterol 5 D (N. N. R.). For a discussion of the actions and uses of cod liver oil with viosterol 5 D, see New and Nonofficial Remedies, 1930, p. 257. Mead Johnson & Co., Evansville, Ind.

*Ephedrine Hydrochloride-P. D. & Co.*—A brand of ephedrine hydrochloride-N. N. R. For a discussion of the actions and uses of ephedrine hydrochloride, see New and Nonofficial Remedies, 1930, p. 167. Ephedrine hydrochloride-P. D. & Co. is supplied in the form of capsules containing, respectively, ½ grain and ¾ grain. Parke, Davis & Co., Detroit.

*Thio-Bismol*.—Sodium bismuth thioglycollate. A salt formed by the interaction of sodium thioglycollate and bismuth hydroxide containing approximately 38 per cent of bismuth. Thio-Bismol is proposed as a means of obtaining the systemic effects of bismuth in the treatment of syphilis (Bismuth Compounds, New and Nonofficial Remedies, 1930, p. 84); it is a water soluble compound, readily absorbable, and produces relatively little local injury. The products is supplied in the form of ampules containing 0.2 gm. of Thio-Bismol. Parke, Davis & Co., Detroit. (*Jour. A. M. A.*, July 19, 1930, p. 200.)

### *Accepted Devices for Physical Therapy*

The following have been accepted by the Council on Physical Therapy of the American Medical Association

for inclusion in its list of accepted devices for physical therapy:

*The Davis Inhalator*.—The Davis Inhalator (Bulard-Davis, Inc., New York) is a portable apparatus designed to assist physicians in the administration of oxygen or a mixture of oxygen and 5 per cent carbon dioxide in resuscitation in various forms of asphyxia. Compressed gases are contained in tanks and by a reducing valve may be delivered at the desired pressure through a breathing bag and mask as demanded by artificial or natural breathing of the patient. The apparatus meets the requirements for inhalators of approved standard and incorporates devices which make for flexibility, adaptability, and safety. (*Jour. A. M. A.*, July 19, 1930, p. 200.)

### *Propaganda for Reform*

*Pompeian Olive Oil Not Acceptable for N. N. R.*—The Council on Pharmacy and Chemistry reports that Pompeian Olive Oil was presented by the Pompeian Corporation for inclusion in New and Non-official Remedies. The Council explains that the product might be recognized as a brand of olive oil, U. S. P. marketed under the pharmacopeial name ("Pompeian" being used merely to identify the firm's brand) were it not that claims of unique advantage and therapeutic potency were advanced. The Council cannot admit in reference to this brand of oil the claim made that the "ease of its digestion and assimilation is far greater than that of any other vegetable or animal oil". After considering the evidence submitted by the proprietors, the Council decided that Pompeian Olive Oil is not acceptable for New and Nonofficial Remedies. (*Jour. A. M. A.*, July 5, 1930, p. 35.)

*Rickets and Vitamin D*.—Without detracting in the least from the merited value of viosterol in the treatment of rickets, certain recent investigations raise a question as to the simplicity of the pathogenesis of rickets implied in the current use of viosterol. It has been pointed out recently that, whereas both viosterol and cod liver oil are extremely efficacious in curing rickets, only the latter contains in addition the indispensable vitamin A. Although the most obvious function of calcium and phosphorus is in the building of bones, there are other demands for these mineral elements which, at times, become of great importance and it has been shown that, whereas vitamin D is concerned with the calcification of bones, the retention of calcium and phosphorus in the body is largely a function of the level of these materials in the diet. A comparison of the efficacy of cod liver oil and of viosterol as prophylactic antirachitic agents showed that of 123 children given viosterol 29 per cent were not protected against rickets, while of 100 given cod liver oil 3 per cent showed rickets, although the former group received twice the number of units of vitamin D given the latter group. (*Jour. A. M. A.*, July 5, 1930, p. 38.)

*Therapy With Ovarian Preparations*.—The Council on Pharmacy and Chemistry sponsors the following statement on therapy with ovarian preparations in

the current (1930) edition of New and Nonofficial Remedies: "Rational as ovarian therapy may theoretically appear to be in some conditions, the actual results are rarely striking, and often nil to the careful observer. It is altogether probable that the activity which may be presented by the fresh gland is not contained in a finished desiccated product, or else, when given by mouth, it is destroyed by the digestive juices; extensive clinical experience has failed to establish the value of desiccated preparations administered orally. There is considerable evidence that the aqueous extracts prepared for hypodermic use are inert . . . much work has been done toward the elaboration of a potent, standardized preparation of the ovary, and as a result of these investigations such potent standardized preparations for use by subcutaneous injection have become available. These preparations have been shown to induce estrus in mature animals and to induce sexual maturity in immature animals. Somewhat limited clinical evidence indicates their probable value in ovarian hypofunction." The Council has omitted all desiccated ovary preparations for oral administration on the ground that there is no adequate evidence for their value and, so far, has not accepted any ovarian hormone preparation, because the evidence for the value of these was considered inadequate. (*Jour. A. M. A.*, July 5, 1930, p. 64.)

*Desiccated Pituitary Preparations Omitted From N. N. R.*—In 1928 the Council on Pharmacy and Chemistry discussed the lack of acceptable evidence for the value of pituitary preparations administered by mouth and concluded that extensive clinical experience had failed to establish the value of desiccated pituitary preparations for oral administration. At that time the Council decided to omit such preparations when the period for the acceptance of the products included in New and Nonofficial Remedies should expire, unless new evidence became available in the meantime permitting a different action. At the expiration of this period no favorable evidence had become available. Accordingly the Council has directed the omission of all desiccated pituitary preparations now included in New and Nonofficial Remedies. (*Jour. A. M. A.*, July 19, 1930, p. 201.)

*A Baker Institute "Diagnosis"*.—The history of every quack concern that professes to cure cancer is monotonously alike. The scheme consists in diagnosing every simple skin lesion, no matter how benign, as cancer. Caustics are then applied and a hole eaten in the tissues, with inevitable disfigurement, and the patient finally sent back home "cured". Of course occasionally the quacks get real cases of malignant disease. Most of these are sent back home in time to avoid the necessity of the "institute" having to sign the death certificate. A recent case is of interest in that the victim showed more intelligence than is frequently displayed and thus saved himself considerable suffering and disfigurement. Mr. I., an Iowa farmer, developed a lesion on the chin that worried him. He went to Muscatine to the Baker Institute, where he was "examined". Mr. I. reports that he

was told that he had cancer of the chin and would have to pay \$250 and also \$60 a week hospital charges for four to six weeks. The Baker Institute, according to the victim, applied their cancer remedy. Then the young man got to thinking and decided that the Iowa State University was not far away and that they probably knew as much about cancer as Mr. Baker and his "institute". He went to the College of Medicine of the State University of Iowa, where the dermatologic department diagnosed the lesion as *Tinea barbae*. Treatment for ringworm of the beard was instituted and in less than two weeks the young man went home. (*Jour. A. M. A.*, July 26, 1930, p. 285.)

## COMMUNICATIONS

### ARTICLES ACCEPTED

#### To the Editor:

In addition to the articles enumerated in our letter of May 29th the following have been accepted:

Carel Laboratories:

Alpha-Naphco

Maltbie Chemical Co.:

Ephedrine Nasal Jelly-Maltbie

Mead Johnson & Co.:

Mead's 5 D Cod Liver Oil with Viosterol

Merck & Co., Inc.:

Pyridium—

Aqueous Solution of Pyridium, 1 per cent

Pyridium Tablets, 0.1 Gm.

Pyridium Ointment, 10 per cent

H. A. Metz Laboratories, Inc.:

Elixir of Pyramidon

Pyramidon Tablets, 1½ grains

National Drug Co.:

Ragweed Pollen Antigen-National

Timothy Pollen Antigen-National

Parke, Davis & Co.:

Ephedrine Hydrochloride-P. D. & Co.

Capsules Ephedrine Hydrochloride-P. D. & Co.,  
¾ grain

Capsules Ephedrine Hydrochloride-P. D. & Co.,  
¾ grain

Thio-Bismol

Ampoules of Thio-Bismol

Pitman-Moore Co.:

Siomine—

Siomine Capsules, ½ grain

Siomine Capsules, 1 grain

Siomine Capsules, 2 grains

Siomine Capsules, 5 grains

G. D. Searle & Co.:

Ampules Mercurochrome-H. W. & D., 1%, 10 cc.+

Ampules Mercurochrome-H. W. & D., 1%, 20 cc.+

Nonproprietary Article—

Alphanaphthol

COUNCIL ON PHARMACY AND CHEMISTRY,

AMERICAN MEDICAL ASSOCIATION.

Chicago, Ill., June 28, 1930.



## WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

President.....	Mrs. Chas. C. Harrold, Macon	Recording Sec.....	Mrs. J. Cox Wall,, Eastman
President-Elect.....	Mrs. Ralston Lattimore, Savannah	Cor. Sec.....	Mrs. Wm. R. Dancy, Savannah
First Vice-President.....	Mrs. S. T. R. Revell, Louisville	Treasurer.....	Mrs. Ben Bashinski, Macon
Second Vice-President.....	Mrs. W. W. Battey, Sr., Augusta	Parliamentarian.....	Mrs. A. H. Bunce, Atlanta
Third Vice-President.....	Mrs. J. E. Penland, Waycross	Editor.....	Mrs. C. W. Roberts, Atlanta

### ANNUAL REPORTS BY COUNTIES AUGUSTA, GA., 1930

#### *Baldwin*

Organized two years. Enrolled members 21. Eligible membership 21. Six meetings held during the year. Two subscriptions to Hygeia obtained. Health work accomplished has been in the daily dispensation of milk to twenty-nine undernourished school children and on furthering buccal health propaganda by showing of the Health film, "Tommy Tucker's Teeth." A dinner was given to the District Medical Society at the annual meeting in Milledgeville. Money was raised by giving a Colonial Costume Pageant and dance on the evening of Washington's birthday; net proceeds \$57. Mrs. John Mobley, President.

#### *Barrow*

Organized six years. Enrolled members 6. Eligible membership 10. Two meetings held during the year. Health work has consisted of sponsoring the showing of health films and in distributing health literature. Subscription given to the Student Aid Fund. The Ninth District Auxiliary was entertained at its semi-annual meeting. Funds are raised by assessment. Mrs. E. R. Harris, Winder, Ga., President.

#### *Bibb*

Organized five years. Enrolled members 56. Ten meetings held during the year. Health work has consisted in showing health films at the Rialto Theater. Two hundred dollars loaned to a student at the University of Georgia and one hundred dollars given to the State Student Aid Fund. Seventy-five dollars given to a student nurse at the Macon Hospital, and a nurse at the Macon Hospital was sent to the Y. W. C. A. Summer Camp last summer. Magazines provided for nurses at Christmas. Children's room at the Children's Ward redecorated and furnished with new toys at Christmas. Sixteen canton flannel wrappers were made for the Children's Ward and bedroom slippers were furnished for same at Christmas. Flowers sent to hospital wards at regular intervals. Two needy families supplied with clothes, food, and

toys at Christmas. Assisted with State Medical Session, May, 1929. Funds raised by an annual card party and by maintaining two sandwich booths at the County Fair. Mrs. Benjamin Bashinski, 120 Buford Place, Macon, Ga., President.

#### *Bulloch, Candler, Evans*

Enrolled members 13. Have endeavored to cooperate with other organizations in the interest of public health. Auxiliary members are health chairmen in other organizations. Funds obtained by Hygeia subscriptions, \$10; contributed to the Student Loan Fund. Mrs. E. C. Watkins, Brooklet, Ga., President.

#### *Chatham*

Organized five years. Members enrolled 40. Eligible membership 71. Four regular meetings were held and two additional meetings were called. Health work consisted in giving toys as prizes to the public school children taking T. A. T. from health officer. Several members have acted as health chairmen in other organizations. Contributed to State Student Aid Fund and to the Film Library Fund. Paid book fee and equipped a boy from Sunshine T. B. unit with clothes to enable him to attend school. Sponsored health films during State Health Education Week and several members helped with the Health Pageant. Funds raised by giving a bridge tournament. Mrs. Lee Howard, 625 East Forty-fourth Street, Savannah, Ga., President.

#### *Cherokee and Pickens*

Organized two years. Enrolled members 14. Eligible membership 16. Six meetings held during the year. Assistance is given to the County Health Agents in any way requested, especially in aiding in examining school children and in the giving of sera. No funds except dues. The wishes of the Medical Society followed. Mrs. John P. Turk, Nelson, Ga., President.

#### *Decatur*

Organized seven years. Enrolled members 2. Eligible membership 5. Health work consists in the cooperation with the County Health Department. Have sponsored health films. No funds other than dues. The organization is so small that it is impossible

to have independent projects, so the best thing we can do is to cooperate with other forces already working for health improvement. Mrs. Gordon Chason, Bainbridge, Ga., President.

*Tri (Bleckley, Dodge, Pulaski)*

Organized one year. Enrolled members 9. Eligible members about 20. Three meetings held. Health work: Through Auxiliary member (Mrs. A. L. Smith), working through Woman's Club, Dental Clinic was held with 100 per cent results. Summer round-up sponsored by Auxiliary through P.-T. A. in Eastman. Have urged birth registration through other organizations. Mrs. Cox Wall, Eastman, Ga., President.

*Elbert*

Organized two years. Enrolled members 10. Eligible members 12. Have assisted at putting on of health program, jointly with County Medical Association and P.-T. A. Funds raised by donations. Mrs. W. A. Johnson, Bowman, Ga., President.

*Fulton*

Organized six years. Members enrolled 148. Eligible members 350. Ten meetings held during the year. Three Hygeia subscriptions secured. Health work has consisted in contributing \$75 to Health Film Library; in furnishing names of available doctors for the P.-T. A. meetings, and in maintaining activities in six hospitals. Other projects have been the loaning of money to six medical students; the contribution of \$100.00 to the State Aid Fund; relief work among the poor, and working through various clubs in promoting health work; helping in "Forget-me-not" drive, and activity in helping the doctors in the State Health Education Week. Academy of Medicine decorated for special meetings of the Medical Society and refreshments served during Emory Clinic Week, meeting Fifth District Medical Society. Funds raised by benefit bridge parties, style shows, commissions on orders of Christmas cards and engraved stationery. Mrs. George M. Niles, 193 Fourteenth Street, N.E., Atlanta, Ga., President.

*Habersham*

Organized five years. Enrolled members 8. Eligible membership 8. Have held ten meetings. Contributed to the State Student Aid Fund. Mrs. P. Y. Duckett, Cornelia, Ga., President.

*Hart*

Organized five years. Enrolled members 8. Eligible membership 8. Have had one general meeting and several call meetings. Health work consists in the cooperation with other organizations for health promotion. Have assisted the Medical Society in Health Education Week. No funds raised outside of

dues. Mrs. A. O. Meridith, Hartwell, Ga., President.

*Jackson*

Organized five years. Members enrolled 12. Eligible membership 17. Have held two meetings. Health work consists in giving T. A. T. to school children; cooperating with other organizations, and contributing \$26 to the State Student Aid Fund, which was raised by donations. Mrs. A. A. Rogers, Commerce, Ga., President.

*Jefferson*

Organized six months. Members enrolled 9. Eligible members 10. Have held four meetings. Hygeia subscriptions 1. Have helped in putting over "Ellis Health Law." Assisted in having examined 1,651 school children, to whom 1,091 antitoxin was given; 1,267 were inoculated for typhoid, and 99 vaccinated against smallpox. Contributed to State Educational Fund and Health Film Library. Held a health program to exhibit health films. An Auxiliary member on Health Committee of every Woman's organization in county. Funds raised by serving dinner at the county school meet. Mrs. S. T. R. Revell, Louisville, Ga., President.

*Randolph*

Organized six months. Enrolled members 9. Eligible members 16. Four meetings held. Too young for program yet. Mrs. W. W. Crook, 340 College Street, Cuthbert, Ga., President.

*Richmond*

The convention of the Woman's Auxiliary for the State of Georgia was a brilliant event of May 13-16. Many of the most representative women of the State were in attendance and the conferences and reports were full of interest and gave evidence of the splendid work done in cooperation with the State Medical Association. The local Auxiliary gained renewed enthusiasm as a result of the convention and in consequence a large and interesting meeting was held in the class room of the University Hospital; Mrs. W. W. Battey, President, presiding. Reports were made by chairmen of recent State Auxiliary conventions. Many letters from delegates at the convention were read, expressing appreciation of the delightful hospitality they enjoyed while guests of the local Auxiliary. The present officers of the Auxiliary will continue to serve until October 1st. There will be a few meetings during the summer months, but the work of the Auxiliary will be directed by the Advisory Board should there be any health measures required on the part of the Auxiliary. It was resolved that the Auxiliary would make an annual contribution to the Student



Loan Fund and endeavor to obtain a scholarship in Junior College for a Georgia boy preparing for a medical course. Mrs. Ralph Chaney was made chairman of philanthropic work. Her committee will cooperate with the Public Health Nursing Service in prenatal and maternity work. There is a large field for workers in city and county for that phase of child welfare. The sum of \$5.00 was donated to the Superintendent of Public Health Nurses to be used for purchasing yeast for pallsagra patients. It was also resolved to send an invitation to the wives of the doctors who were not present at the meeting to become members of the Auxiliary. The Decoration Committee was named to have charge of decorating the Junior College Auditorium for the Commencement exercises and the Country Club for the Commencement ball. It was resolved to offer the cooperation of the Auxiliary to the Board of Health in the fight to exterminate the mosquito. The social program of the Auxiliary was discussed and further plans will be made and placed before the Auxiliary at their first meeting in October. The Executive Committee is composed of the officers and seven members at large. The annual dues are \$1.50, 75 cents of which is sent to the National and the balance kept for Auxiliary purposes. Mrs. W. W. Battey, 2239 Kings Way, Augusta, Ga., President.

#### Toombs

Organized five years. Held one meeting. Hygeia subscriptions 1. Have secured four grand jury recommendations for Ellis Health Law. Health films shown and window displays during Health Education Week arranged. Funds raised by presentation of play. Mrs. J. E. Mercer, Vidalia, Ga., President.

#### Ware

Organized five years. Enrolled members 18. Eligible members 19. Have held ten meetings. Obtained seven Hygeia subscriptions. Health programs put on in the schools each month. Assisted in sponsoring nutrition work by Red Cross and assisted in putting on health programs during Health Educational Week. Funds raised by a benefit bridge party. Hygeia subscriptions, and personal contributions; \$60 was given to State Loan Fund and \$5.00 to Health Film Library. Mrs. William M. Folks, Waycross, Ga., President.

#### Washington

Organized three years. Enrolled members 22. Eligible members 22. Held one meeting. Health work consists in cooperation with other agencies. Mrs. James B. Dillard, Davisboro, Ga., President.

MRS. ALLEN H. BUNCE. Acting Secretary.

#### NEWS ITEMS

The Macon Medical Society met at the Macon Hospital on July 2nd. Dr. J. K. Kay, Byron, gave case reports; Dr. T. E. Rogers, Macon, discussed clinical cases.

The Chattahoochee Valley Medical and Surgical Association elected the following officers on July 9th, for the ensuing year: Dr. C. W. Roberts, Atlanta, President; Dr. A. H. Hilsman, Albany, First Vice-President; Dr. Marion Davidson, Birmingham, Second Vice-President; Dr. W. J. Lowe, Opelika, Ala., Secretary-Treasurer. Members of the Council elected were: Dr. Gilbert Douglas, Birmingham, Chairman; Dr. Frank K. Boland, Atlanta; Dr. Hugh McCulloh, West Point; Dr. C. H. Richardson, Jr., Macon; Dr. Henry Green, Dothan, Ala. The association will again meet in Albany in 1931.

The members of the Jefferson County Medical Society and the Woman's Auxiliary met in the Hotel Jefferson at Louisville on July 5th.

Dr. J. W. Davis, Athens, read a paper before the Clarke County Medical Society in Athens on July 3rd, entitled "Cesarean Section."

Dr. G. C. Hewell, formerly an interne at the Piedmont Hospital, Atlanta, has moved to Elberton and opened an office for the practice of medicine.

Dr. Charles E. Dowman, Atlanta, announces the association of Dr. Edgar F. Fincher, Jr. Practice limited to neurological surgery.

Dr. Wm. A. Smith announces the opening of his office in suite 707 Medical Arts Building, Atlanta.

Dr. Edson W. Glidden, former Superintendent of the State Tuberculosis Sanatorium, Alto, has accepted the position as Superintendent and Medical Director of the Worcester County Sanatorium at Worcester, Mass.

Dr. C. Thompson, Millen, owner and resident manager of the Millen Hospital, entertained the doctors of Jenkins and adjacent counties at dinner in the hospital dining room on July 11th. He read a summary of the hospital service for the month of June and reviewed case records. Case reports were discussed by Drs. L. F. Lanier, Sylvania; R. L. Miller, Waynesboro; J. M. Byne, Jr., Waynesboro; W. R. Lovett, Sylvania; J. B. Lewis, Waynesboro; H. F. Bent, Midville.

The Burke County Medical Society met at Midville on July 3rd. Plans were discussed for an intensive campaign for the eradication of malaria. A thorough system of drainage will be undertaken when funds are available.

The First District Medical Association met at Hotel DeSoto, Savannah, July 29th. Scientific program consisted of the following titles: Endemic Typhus Fever by Dr. L. Fielding Lanier, Sylvania; The Treatment



of Cardiac Decomposition, with Special Reference to the Use of Digitalis, by Dr. H. Cliff Sauls, Atlanta; Fractures of the Skull, by Dr. Chas. Usher, Savannah; Hemolytic Jaundice, by Dr. Julian K. Quattlebaum, Savannah. The Georgia Medical Society was host at a luncheon served at the Hotel DeSoto, motor trip to Tybee and surf bathing in the afternoon.

The Tenth District Medical Society will meet at Louisville on August 28th. Dr. Cyrus W. Strickler, Atlanta; Dr. Irvin Phinzy, Augusta, and Dr. Lansing Lee, Augusta, will read papers entitled "The Pneumonias"; Dr. Samuel C. Ketchins, Louisville, "Malaria"; Dr. R. L. Rhodes, Augusta, "Cancer"; Dr. E. A. Wilcox, Augusta, "Surgery." Address by Dr. G. Y. Moore, Cuthbert, and Dr. Arthur G. Fort, Atlanta, President and President-elect of the Association, respectively.

Dr. J. E. Lester, Commissioner of Health for Cobb County, announces the removal of his office to Marietta.

Dr. C. N. Wasden, formerly at the University Hospital, Augusta, announces the removal of his office to 1015 Georgia Casualty Building, Macon.

The Randolph County Medical Society held its regular monthly meeting in the Woman's Club room, Cuthbert, on August 7th. Dr. LeRoy W. Hubbard, Chief Surgeon of the Georgia Warm Springs Foundation, was the principal speaker. The lecture was illustrated with motion pictures.

The Washington County Medical Society in cooperation with a number of other organizations sponsored a conference on Malaria at the court house in Sandersville on August 6th. Plans for the meeting were arranged by Dr. O. L. Rogers, Sandersville. Dr. G. Y. Moore, President of the Association; Dr. Arthur G. Fort, President-elect of the Association; Dr. T. F. Abercrombie, Commissioner of Health; Dr. C. L. Ridley, Macon; Dr. M. E. Winchester, Director of County Health Work, attended the conference.

Dr. Earl Floyd and Dr. J. L. Pittman announce their association in the practice of urology. Offices in the Hurt Building and the Medical Arts Building, Atlanta.

Dr. and Mrs. Steve B. Malone, Sandersville, have returned from an extended tour of Europe. Dr. Malone attended the European Clinic Assemblies of the Inter-State Postgraduate Medical Association of North America.

The United States Department of Agriculture through its Office of Information, released on August 4th a condensed outline of its work in the eastern food inspection district showing the results of inspection of canned vegetables for the fiscal year ending March 1, 1930. Close surveillance was maintained not only over the canning processes and raw materials used in canneries, but also over the finished products, says W. R. M. Wharton, chief of the district. Officials of the district inspected more than 750 factories and

examined about 1,500 samples of canned vegetables, including asparagus, beans, beets, corn, mixed vegetables, peas, pimentos, pumpkin, squash, sauerkraut, succotash, sweet potatoes, spinach, tomatoes and tomato products. Twenty-eight seizures, totaling more than 7,500 cases of adulterated and misbranded vegetables were made, followed by citations of the packers to hearings to show why criminal prosecutions should not be instituted. The more flagrant violations, resulting in regulatory action, were under processing, causing decomposition of the canned product; the use of decomposed material in tomato puree and catsup; the addition of water, seepage juice, or cyclone juice to canned tomatoes, and short weight and slack filling.

Dr. and Mrs. C. K. Sharp, Arlington, visited their son, Dr. Clarence M. Sharp, Saranac Lake, N. Y. Dr. C. M. Sharp is Medical Director and Superintendent of the Stony Wold Sanatorium, Lake Kushaqua, N. Y.

#### OBITUARY

*Dr. Edward Thomas Gibbs*, Gainesville; Member; University of Maryland Medical School and College of Physicians and Surgeons, Baltimore, Md., 1906; aged 48; died of heart disease at the home of his mother at Social Circle on July 2, 1930. He took a postgraduate course at Harvard University Medical School, Boston. Doctor Gibbs was a graduate of Mercer University, Macon. After receiving his degree in medicine and serving as an interne, he located in Gainesville and began the practice of his profession. Doctor Gibbs built an extensive practice throughout Hall and adjoining counties and endeared himself to all his acquaintances. His character portrayed all that is symbolized by the word "gentleman". He took an active interest in all civic and religious affairs. Doctor Gibbs was a member of the Hall County Medical Society, American Medical Association, Rotary Club, F. & A. M., and the First Baptist Church. Surviving him are his widow, one son, James Hurst Gibbs; one daughter, Elizabeth Colquitt Gibbs; one brother, John M. Gibbs, Social Circle; three sisters, Miss Ethlene Gibbs and Mrs. E. E. Cowan, Social Circle, and Mrs. Helen Flournoy, Chattanooga, Tenn., and his mother, Mrs. Fannie L. Gibbs, Social Circle. Funeral services were conducted from the home of his mother by Dr. R. Q. Leavell, pastor of the First Baptist Church, Gainesville. Interment was in the City Cemetery at Social Circle.

*Dr. Frederick Wahl*, Savannah; Member; University of Georgia Medical Department, 1894; aged 65; died at his home, No. 3 East Gordon Street, on June 28, 1930. He was born on May 8, 1865, in Petersburg, Ontario, Canada. Doctor Wahl was a member of the Georgia Medical Society, American Medical Association, and the Lutheran Church of the Ascension. He took postgraduate work at the New York Medical College in 1907. Doctor Wahl had a large circle of friends and had an excellent reputation as a physician of ability and skill. Surviving him are his widow, two daughters, Misses Alma Grace and Christine

Dorothy Wahl; one brother, Peter Wahl, Stratford, Ontario. Funeral services were conducted from the Lutheran Church of the Ascension by Rev. C. A. Linn and interment in the Bonaventure Cemetery.

*Dr. William H. Henderson*, Atlanta; Chattanooga Medical College, Chattanooga, Tenn.; aged 49; died at his home, 17 Francis Street, on July 22, 1930. He was a native of Chickamauga, Ga., and moved to Atlanta about fifteen years ago. Doctor Henderson was engaged in the drug business and an active practitioner until his death. He was a member of the Universalist Church. Surviving him are his widow; one son, William H. Henderson, Jr.; one daughter, Mrs. W. O. Gaffney. Funeral services were conducted from the Fortified Hills Baptist Church by Rev. W. H. Wier and interment in Hollywood Cemetery.

*Dr. Eugene Lee McCurdy*, Stone Mountain; Emory University School of Medicine, Emory University; aged 31; died at the home of his mother, Mrs. W. P. Humphries, Stone Mountain, July 28, 1930. He began the practice of medicine in Dahlonga and after a few years accepted a position on the staff as resident surgeon of a hospital at Port Chester, N. Y. Surviving him are his mother, widow, and one daughter, Miss Camilla McCurdy. Funeral services were conducted by Rev. Ralph Hawkins from the First Baptist Church and interment in the Stone Mountain Cemetery.

*Dr. Jack M. Bates*, Canton; Member; Southern Medical College, Atlanta, 1890; aged 61; died at his home on June 26, 1930. He was a kind and generous practitioner, held in high esteem by all his acquaintances.

#### GREATER NEW YORK COMMITTEE PUBLISHES REPORT OF HEALTH EXAMINATION CAMPAIGN

The New York Committee on Health Examination, representing the five county medical societies of Greater New York, has published the report of its recent campaign. It contains an account of how the drive was planned and executed, covering in detail the various activities conducted by the committee, and should be particularly valuable to groups contemplating similar undertakings.

In the section of the publication devoted to an evaluation of the campaign several evidences of concrete accomplishment are enumerated. Tangible results are seen in the replies to a questionnaire sent to a representative group of practicing physicians of Greater New York who reported a 25 per cent increase in the number of applications for health examinations during the period of the campaign. Of more significance to the committee was the fact that 85 per cent of the physicians canvassed stated that in their opinion the campaign would have been more effective if continued over a longer period.

The drive has successfully inaugurated a movement

for public education which, however, must be carried forward with intelligence and persistence. The Greater New York Committee has therefore been reappointed to continue its work.—Health News, July 7, 1930.

#### ROCHE BUILDS AGAIN

In these days of business retrogression, while the "repression" is supposedly on, it is pleasing to hear of at least one company whose increasing business warrants a further extension of its present manufacturing facilities. On June 11th, a little less than a week before the first anniversary of Hoffman-La Roche, Inc., in their new home at Nutley, N. J., ground was broken for two new buildings. Further details are not yet available, but the expansion at this time is convincing evidence of the faith which the profession puts in Roche "medicine of rare quality."

The pictures in the Roche ad in this issue attempt to reveal only a few of the interesting sights to be seen by any physician who visits these ultra-modern scientific laboratories in Nutley. Visitors, always welcome, marvel at the immaculate cleanliness, abundance of light, intricate apparatus, and meticulous care exercised in each manufacturing process. If you did not receive a copy of "The Doctor Visits Roche" write to the Roche Scientific Department for this interesting booklet.

#### DEXTRI-MALTOSE FOR MODIFYING LACTIC ACID MILK

Physicians who are partial to the use of lactic acid milk in infant feeding are finding Dextri-Maltose the carbohydrate of choice.

To begin with, Dextri-Maltose is a bacteriologically clean product, unattractive to flies, dirt, etc. It is dry, and easy to measure accurately.

Moreover, Dextri-Maltose is prepared primarily for infant feeding purposes by a natural diastatic action

#### SEXUAL FEELING IN WOMAN

In the advertising columns of THE JOURNAL this month appears the announcement of a new book by Dr. G. Lombard Kelly, Professor of Anatomy in the Medical Department of the University of Georgia. The title of the book is "Sexual Feeling in Woman" and the subject is treated from the viewpoints of anatomy, physiology, and psychology. The purpose of the book is to furnish intelligent and educated adults with vital sex information, especially as it pertains to lessening frigidity or coldness in women. The section on anatomy is illustrated and especial emphasis is laid on the importance of the various organs.

While the average physician could no doubt gain much by a perusal of the book, it is intended primarily to be sold by doctor's prescription where indicated.

In the past few years Doctor Kelly's researches in the physiology of reproduction have attracted wide attention and a book of this kind written and edited by him is certain to be welcomed.

# BOOK REVIEWS AND ABSTRACTS

## ABSTRACT

*Primary Lung Tumor.* Report of Six Cases with Necropsy. Lila M. Bonner, *J. A. M. A.*, 94: 1044 (April 5) 1930.

From a study of the literature and of six original cases, confirmed by microscopic diagnosis, Bonner concludes:

Primary cancer of the lung is now responsible for from 5 to 10 per cent of deaths from cancer. At the Steiner Clinic, in 150 cancer necropsies, five cases were diagnosed cancer of the lung. Carcinoma of the lung is more common than sarcoma. Cancer is more frequent in men than in women, and its highest incidence is in the sixth decade. It may be associated with lung abscess or tuberculosis.

The cardinal symptoms are pain, dyspnea, cough, sputum, and fever. According to Bonner's clinical classification there may be:

1. Slight or mild symptoms from a small solitary nodule.

2. Severe symptoms from extensive pulmonary involvement.

3. Symptoms due to invasion of, or pressure on, the mediastinum from extensive pulmonary involvement.

4. Symptoms from extensive metastatic areas from an asymptomatic tumor.

A careful history, physical examination and roentgenogram will usually establish the diagnosis.

Early surgical resection offers the only hope of cure. Roentgen therapy has afforded temporary palliation in some instances.

C. Reed, M.D., Professor of Tropical Medicine, the Pacific Institute of Tropical Medicine within the George Williams Hooper Foundation for Medical Research of the University of California. Contains 140 pages with 60 illustrations. Publishers: J. B. Lippincott Company, West Washington Square, Philadelphia.

*Clinical Nutrition and Feeding in Infancy and Childhood*, by I. Newton Kugelmass, M.D., Ph.D., Sc.D., Associate Attending Pediatrician, Fifth Avenue Hospital; Riverside Hospital; Pediatrician, Hospital for Ruptured and Crippled; Director, Heckscher Institute for Child Health. Contains 345 pages with 37 illustrations. Publishers: J. B. Lippincott Company, West Washington Square, Philadelphia.

*Burns, Types, Pathology and Management*, by George T. Pack, B.S., M.D., Fellow of the Memorial Hospital, New York City; formerly Professor of Pathology and Lecturer in Minor Surgery, the School of Medicine, University of Alabama; one time Instructor in Pharmacology and Toxicology, Yale School of Medicine; one time Assistant in Physiology, Ohio State University; member American Physiological Society; American Association of Pathologists and Bacteriologists, and A. Hobson Davis, B.S., M.D., Instructor in Pathology, University of Alabama. Contains 364 pages with 60 illustrations. Publishers: J. B. Lippincott Company, West Washington Square, Philadelphia.

*Manual of the Diseases of the Eye for Students and General Practitioners*, by Charles H. May, M.D., Director and Visiting Surgeon, Eye Service, Bellevue Hospital, New York, 1916 to 1926, Consulting Ophthalmologist to the Mount Sinai Hospital, to the French Hospital, to the Italian Hospital, New York, and to the Monmouth Memorial Hospital; formerly Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia University, New York. Thirteenth edition, revised. Contains 461 pages with 374 original illustrations. Publishers: William Wood & Co., 156 Fifth Avenue, New York City.

*International Clinics*—A Quarterly of Illustrated Clinical Lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otolaryngology, Rhinology, Laryngology, Hygiene, and other topics of interest to students and practitioners, by leading members of the medical profession throughout the world. Edited by Henry W. Cattrell, A.M., M.D., Philadelphia, with the collaboration of Chas. H. Mayo, M.D., Rochester, Minn., and et al. Volumes I and II, fortieth series, 1930. Contains 304 pages each. Publishers: J. B. Lippincott Company, P. O. Box 1579, Philadelphia, Pa.

## BOOKS RECEIVED

*Doctor and Patient*—Papers on the Relationship of the Physician to Men and Institutions, by Frances Weld Peabody, M.D., Professor of Medicine, Harvard Medical School; Director of the Thorndike Memorial Laboratory; Visiting Physician and Chief of the Fourth Medical Service, Boston City Hospital, 1921 to 1927. Contains 95 pp. Publishers: The Macmillan Company, 60 Fifth Avenue, New York City. Price, \$1.50.

*Medical and Surgical Year-Book*—Physicians Hospital of Plattsburgh, N. Y. The book comprises Wednesday afternoon invitation lectures, papers of the cardiac round table, the first Beaumont lecture, and collected papers by the staff. Contains 322 pp. Publishers: The William H. Miner Foundation, Plattsburgh, N. Y.

*Medical Service*—Its Relation to Collections and How to Collect, by Alfred Hendrickson. Contains 218 pp. Publishers: Augsburg Publishing House, Minneapolis, Minn.

*Tropical Medicine in the United States*, by Alfred



## PEPTIC ULCER

Arthur Dean Bevan, Chicago (*Jour. A. M. A.*, June 28, 1930), concludes his review by stating that the field of peptic ulcer belongs to no one specialty. It belongs to and must be cultivated by many men: the general practitioner who will see first the great majority of the cases, the internist, the surgeon, the roentgenologist and the pathologist. No one group can claim this field exclusively as its own. There can be no just conflict between the internal management and the surgical treatment of these cases. The internist who can see little or no place for a consideration of the surgical treatment in 20 per cent of cases of peptic ulcer has a narrow conception of this field and is a menace to many of his patients. On the other hand, the operating surgeon who does not realize that 80 per cent of cases of peptic ulcer can be cured by good medical management may be a more serious menace to the patients that fall into his hands. The roentgenologist who believes that the diagnosis of peptic ulcer depends on roentgenologic observations alone and who independently desires to make the diagnosis on such evidence without a knowledge of the history and gross clinical picture is working at a great disadvantage. Clearly, this is a field for good team work and in this team there must be a number of workers: the general practitioner, the internist who is especially trained in stomach work, the surgeon, the roentgenologist and the pathologist. It is only in a clinic where such team work has been developed that a patient with an ulcer of the stomach can receive the best treatment that modern scientific medicine has to offer. It is only by treating this problem as a piece of scientific research that we can hope to solve it.

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## SYMPOSIUM ON MALARIA

### PLASMOCHIN IN THE TREATMENT OF MALARIA\*

R. L. MILLER, M.D.  
Waynesboro

Any discussion of malaria that does not take into consideration its mode of transmission is inadequate. I shall therefore ask that you bear with me in a short discussion of this phase of the subject.

Malaria is dependent upon two hosts, man and the anopheles mosquito for its development and transmission. Every person infected with malaria carries in his blood two forms of the malarial parasite, the asexual or schizonts, and the sexual or gametocyte. The asexual form reproduces in man, while the sexual reproduction takes place in the stomach of the anopheles mosquito. Malarial parasites produce pathologic lesions in both hosts that may prove fatal.

The febrile reaction or symptoms of acute malaria in man are due chiefly to the toxins that are liberated by the asexual parasite during sporulation and the blocking of the capillaries by corpuscles that are infected with the parasites. The sexual form of the parasite produces no symptoms in man. It is, however, the only source of infection to the mosquito.

We must bear in mind that in a person carrying both forms of the parasite in his blood it is often almost impossible to find either, while in the same person at other times both can be found in great numbers. This is especially true of the sexual form and for that reason the thick smear should be used and we should be very guarded in our conclusions. We should also remember that in the tertian and quartan types we are

unable to differentiate between the sexual and asexual parasites.

I have often wondered if we do not make a serious mistake in regarding malaria as an acute disease. Should we not rather look upon it as a chronic condition with an acute exacerbation. I do know that every person who has had an attack of malaria should be regarded as a potential malarial carrier until he has been proven by repeated blood examinations to be free of gametocytes.

Since Juan del Vego brought cinchona bark from Ecuador in 1640 and the discovery of its alkaloid, quinine, in 1820, which marked the true era in therapeutics, these remedies have been, and justly so, the greatest boon to those suffering from malaria. As valuable as quinine has been in the treatment of malaria, controlling as it does the acute symptoms of the disease, it does not destroy the gametocytes when given in large doses over a long period of time. It is indeed very unfortunate that so valuable a remedy does not destroy both forms of the parasite and render the malarial patient no longer a source of infection to the mosquito. In the past we have had to rely for the destruction of the gametocytes upon building up our patients and on phagocytosis.

The incidence of malaria is so great, its clinical manifestation so variable, uncertain and often so perplexing and it is so often fraught with such serious results that we should receive with open arms any contribution to its treatment and prevention.

Recently there has been manufactured a synthetic drug, ethylaminoquinolin tannate, that has been placed on the market under the trade-name of plasmochin, that has certain distinct advantages over quinine in the treatment of malaria. This preparation has been given extensive trial in Italy and other European countries with marked success. The

\*Read before the Medical Association of Georgia, Augusta, Ga., May 14, 1930.



United Fruit Company has given it a very thorough trial in its various hospitals in the tropics and in its medical reports speak in most glowing terms of its effect upon malaria. It has been my good fortune since this drug was first brought to my attention, through the courtesy of the Winthrop Chemical Company, the American agents, to have been able to give it a thorough trial in over 200 cases of tertian and estivo autumnal malaria.

It has been conceded by practically all who have investigated the action of plasmochin that it has a selective action on the gametes. From an epidemiological point of view this action is most important. It is from this viewpoint that this paper is presented. We know that quinine does not destroy the gametocytes, but on the contrary it favors their appearance in the peripheral blood, thus making it easier for the mosquito to become infected. In the treatment of tertian malaria plasmochin will control the acute symptoms. This may not be done as rapidly as with quinine, but when we take into consideration the difference of not destroying the gametocytes on the one hand and the certainty of destroying them on the other, we cannot estimate the value of plasmochin. In the estivo autumnal type plasmochin alone is not effective in curing the attack. But when given with quinine as plasmochin compound it will control this type of malaria with the decided advantage of freeing the peripheral blood of the sexual forms of the parasite.

I have used plasmochin in conjunction with quinine in the following manner. I give twenty grains of quinine and one grain of plasmochin daily until the acute attack is under control. I then give two tablets of plasmochin compound three times each day, observing the following routine:

For 5 Days—Plasmochin treatment

For 4 Days—No treatment

For 5 Days—Plasmochin treatment

For 4 Days—No treatment

For 5 Days—Plasmochin treatment

For 4 Days—No treatment

For 5 Days—Plasmochin treatment

In those individuals who have an idiosyncrasy to quinine, plasmochin is the best

remedy that we can use. The administration of plasmochin is not without some slight danger of mild toxic symptoms unless given with caution. However, in my use of the drug I have met with only two cases which showed any manifestation of toxicity. One was the case of a man who was in very poor health before coming down with malaria and whose environment was very poor. The other was in a young lady who had to give up training as a nurse on account of a chronic colitis. In the man there was slight cyanosis of the lips and fingers and mild epigastric pain. In the young lady there was no cyanosis, but mild epigastric pain and nausea. The safest plan is to give the drug in the smallest dose and always on a full stomach. I have never used more than one grain daily. Plasmochin compound is better borne than plain plasmochin.

It has been my observation that relapses, not re-infections, are very much less under the use of plasmochin than when quinine alone is used. I have also noted that in those patients who have very large spleens in connection with their malarial infection, the spleen returns to its normal size very much more rapidly under plasmochin than it does under quinine.

In every case in which I have used plasmochin there has been a more rapid gain in weight and strength and the patient has been able to resume his daily work earlier.

The following three case reports will give you an idea of the effective manner in which plasmochin acts in malarial infections:

#### CASE REPORTS

*Case I.*—A negro presented himself for examination with a decidedly palpable spleen, but no other symptoms. He had a negative Wassermann reaction. In his blood there were many malarial crescents, showing as many as three to each field. He was placed on plasmochin compound, two tablets three times daily. His blood was examined three times each day, each slide showing fewer crescents, until on the third day it was impossible to find any parasites. This man was a typical malarial carrier and is only one among the innumerable menaces to the public health that are to be found in persons who have had malaria.

*Case II.*—A young white man began having chills and fever of the tertian type in June, 1928. He was placed on thirty grains of quinine bi-sulphate daily for four days. He was then instructed to continue quinine in ten-grain doses each night for eight weeks. In August he had another attack when the estivo

autumnal parasites were found with numerous crescents in each slide. He was again given thirty grains of quinine for a period of four days and instructed to follow with quinine as before each night. Every specimen of blood examined showed parasites. In September he had a return of fever when he was placed upon plasmochin compound. This being the first case in which I had used plasmochin I watched it very carefully, taking daily specimens of his blood. On the third day no crescents could be found and weekly specimens were examined for a period of nine weeks, using the thick smear without any reappearance of parasites.

*Case III.*—A negro had repeated attacks of malaria during June, July, and August, 1929. He had taken large doses of quinine over a long period of time. He continued to show crescents in his blood and whenever he stopped quinine he would again develop fever. I purposely withheld plasmochin in the treatment of this case in order that I might use it as a control. In September I put him on two tablets of plasmochin compound three times a day, with instructions to return on the fifth day. The specimen of blood taken on that day showed only two crescents. A specimen taken on the ninth day was free of all parasites and he was feeling well and had begun picking cotton. Weekly specimens showed no crescents for a period of four weeks.

In no case have I found that the parasites remained in the blood under plasmochin treatment longer than nine days, while in the majority of cases they disappeared in from three to six days.

#### CONCLUSIONS

- 1.—Plasmochin is effective in the treatment of tertian malaria.
- 2.—Plasmochin compound is effective in the treatment of estivo autumnal malaria.
- 3.—In all forms of malarial infection plasmochin has a selective action on the sexual forms of the parasite, freeing the blood in from two to nine days.
- 4.—The administration of plasmochin comes nearer accomplishing the original idea of Koch in breaking the vicious circle of malaria by destroying the sexual forms of the parasite in the human host, thereby making him non-infectious to the mosquito.
- 5.—From an epidemiological point of view it is the greatest addition to our armamentarium in the fight against malaria since the discovery of quinine in 1820.

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 Clinical Diagnosis by Laboratory Methods.—Todd.

## MALARIA CONTROL IN DOUGHERTY COUNTY\*

J. A. REDFEARN,‡ M.D.  
 T. H. D. GRIFFITHS,† M.D.  
 Albany

### *Initial Efforts to Secure Malaria Control.*

—For a number of years citizens of Dougherty County, Georgia, slyly admitted a malaria problem, but many steadfastly refused to publicly acknowledge it; mainly through a mistaken idea that it would re-act unfavorably. A number of individuals and organizations during the past fifteen years have earnestly endeavored through surveys, legislation, etc., to carry out malaria control measures, the chief one being drainage. The State Board of Health, mainly through the chief engineer, L. M. Clarkson, had repeatedly, over several years, urged local authorities to inaugurate control measures. The old fear lest activity along this line would be misunderstood and cause outsiders to think Dougherty County, because of malaria, an undesirable place in which to live, asserted itself. Then, too, the serious objection of the high cost of drainage invariably discouraged efforts. The Albany Kiwanis Club took up the matter with enthusiasm and its committee did some splendid work among land owners with the idea of signing up a drainage district of about 30,000 acres. It went well until the owners of around 12,000 acres were signed and then for various reason, mainly fear of cost, other land owners refused to sign. According to State law, if 18,000 acres could be signed up the matter would be put through. This committee could not do it, and naturally felt disappointed, but not discouraged. So, a letter was addressed to Gov. L. G. Hardman, calling his attention to the malaria situation. Governor Hardman, after consulting the State Board of Health officials, called the health commissioners in southwest Georgia to meet in Albany and an entire day was spent outlining plans for a State-wide campaign. A similar meeting was held in southeast Georgia. Fol-

\*Read before the Medical Association of Georgia, Augusta, Ga., May 14, 1930.

‡Chairman of the Public Health Committee of the Albany Kiwanis Club.

†Epidemiologist of the United States Public Health Service.

lowing these meetings the State Press Association which met in Atlanta in December listened with a great deal of interest to discussions on malaria by representative citizens throughout the State and by Dr. L. L. Williams, Jr., of the United States Public Health Service, who discussed the practicability of the Paris Green method, which was not only proving efficient, but much more economical than other methods.

The Kiwanis Committee<sup>‡</sup> secured a petition signed by many leading citizens of Dougherty County requesting, through the State Board of Health, that Doctor Williams come to Albany. Several meetings with the Dougherty County Board of Health and representatives from all civic organizations were held, with State Board of Health representatives and the representative of the United States Public Health Service in attendance. To the first county in the United States to put on county-wide malaria control, an offer was made of the assistance of the United States Public Health Service for a period of at least two years without added expense to that county. It was further stated that there were counties in several Southern States contemplating carrying out these measures. This statement aroused the workers to greater efforts and they called in several groups from different organizations, the County Board of Health and the County Commissioners. Almost at every turn the old arch enemies—"fear of publicity" and "prohibitive cost" reappeared. The commissioners asked for an expense budget. It was estimated that a one-mill tax on the \$17,000,000 taxable property of the county would yield sufficient funds. There seemed to be no serious opposition at this time so the commissioners voted the appropriation in the spring of 1929.

*Physiographic Features of Dougherty County.*—The greater part of Dougherty County lies within what is known as the Dougherty Plain, as the smooth country of southwest Georgia is designated.\* The general surface of this plain is level, undulating, or slightly rolling. The elevation varies from 190 to 215 feet above sea level.

*Lime Sinks.*—Outstanding features of the

surface of the county are extensive and numerous "lime sinks", more or less irregular depressions varying in size from small depressions to those occupying two or three hundred acres. In the western section of the county the depressions assume more of the character of swamps with sluggish streams. Most of the lime sinks during a season of high rainfall become ponds of more or less constancy. Some of the lime sinks do not contain water during a dry season or even in seasons of average rainfall. However, there are more than 500 lime-sink ponds in the county which are permanent bodies of water, and these constitute the *Anopheles quadrimaculatus* breeding areas that have made Dougherty County highly malarious. The swamps support growths of cypress, bay, tupelo, and black gum, smilax, "maiden cane" (*Panicum hemitomum*) and other hydrophytic plants. The shallow ponds generally support a rank growth of maiden cane. The natural drainage of Dougherty County is by four streams (and tributaries) running in a southerly direction—namely, Flint River, Cooleewahee, Kiokee, and Chickasawhatchee creeks (western boundary).

*Soils.*—This county is in the belt of red soils, and all but two of them are sandy in character. They range in texture from light, loose deposits of sand to a sandy clay loam and sticky, plastic clay, only slightly sandy at the surface. While most of the soils are very sandy at the surface, all but a few grade into a friable, sandy clay subsoil, either within the three-foot soil section or just below.

Bedrock is found all over the county at no great depth. This consists chiefly of limestone. Solution of the limestone and the sinking down of the overlying materials into "lime sinks" has formed one of the most conspicuous topographic features of the region and has an important influence on the derivation and formation of some of the soils, as well as forming ponds and lakes, which, with their support of vegetation and flottage, furnish ideal and widely distributed breeding places for *Anopheles quadrimaculatus*, the chief vector of malaria in the Eastern United States.

\*Geology of the Coastal Plain of Georgia, Otto Veatch, Bull. No. 26, Geological Survey of Georgia, p. 30.



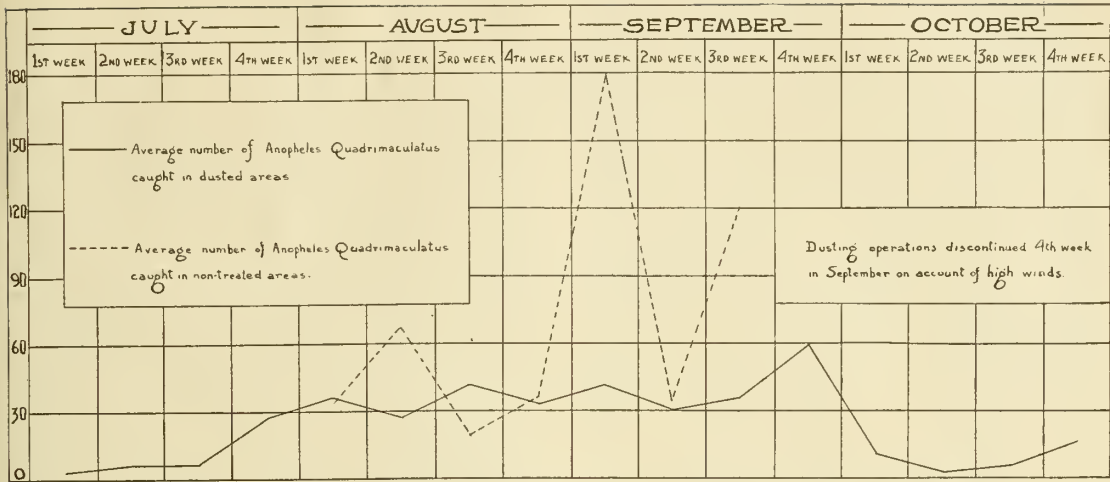


Chart showing relative abundance of malaria mosquitoes in treated and non-treated areas.

*Climate.*—The first killing frost usually occurs about the middle of November, and last in the spring is about the first week in March. The annual average rainfall is approximately fifty inches. Precipitation is fairly well distributed throughout the year, although the “growing season” usually has the greatest rainfall, while the months of least rainfall are the autumn months. In both 1928 and 1929 there was an excess of more than fifteen inches above the normal annual rainfall.

*Malaria Prevalence.*—Malaria undoubtedly has occurred in more or less endemic foci in the county from the early settlement. Scarcely anything else could account for the lack of agricultural development in Dougherty County or could paint the drab picture of inactivity existing in many parts.

*Control Measures.*—The Dougherty County Board of Health employed a field director for malaria control, and he entered upon duty April 10, 1929. No survey in detail had been made of the county in order to locate the *Anopheles* breeding places. The only map of the county available was the Soil Survey Map, which showed the lakes and some of the large ponds. The first problem was to find the important breeding areas and locate them on a map. There was insufficient time to conduct a thorough survey of the county, but with known breeding areas the season’s work was inaugurated and others were added as continued surveys progressed. An epidemiologist and an engineer

of the United States Public Health Service

*Blood Index.*—Blood specimens (thick) were taken from 1,680 school children (primary grades) in the city of Albany and in the rural sections of Dougherty County about the middle of March, 1929, with the following results:

	No. Exams.	No. Positive	Per Cent Positive
City white schools (4).....	750	15	2.0
City colored schools (5).....	596	31	5.2
Rural white schools (2).....	22	1	4.5
Rural colored schools (15)....	312	134	42.9
Rural white and colored schools (17) .....	334	135	40.4
City white and colored schools (9) .....	1346	46	3.4
Total white and colored schools (26) .....	1680	181	10.8

The above spring index represents “carried-over” cases from the previous season. It is a high rate of infection. Another index was taken at the same time this spring, and the reduction is shown herein under the head of results.

were detailed to this study and the chief engineer of the Georgia State Board of Health gave considerable of his time.

The method of control\* determined upon was the application of Paris Green, at ten-day periods, to all located, important *Anopheles quadrimaculatus* breeding areas. For this purpose the county was divided into three districts of about equal areas, with the

\*“Development of a Power Dusting Device for Applying Paris Green as an Anopheline Larvicide,” J. A. LePrince and H. A. Johnson, Reprint No. 1280, P. H. R., April 26, 1929, pp. 1001-1017.

inter-district lines extending north and south. A foreman, with three men equipped with hand-power dusters and other necessary equipment, was placed in charge of each district. Motor trucks were used for transporting men and material, the foreman acting as driver for each outfit. The larvicidal mixture used was a 15 per cent (by volume) of Paris Green (known to have satisfactory lethal qualities) in hydrated lime. The aim was to apply three-fourths pound of Paris Green to the acre of water surface. It was early found that hand-mixing of Paris Green and lime was not satisfactory, so a standard mechanical mixing machine (100-pound capacity) was installed. In addition to the three-hand dusting gangs, the county also operated one motor-boat outfit, consisting of two men, with motor truck for carrying the boat and other equipment. The boat used was of metal, flat bottom, 14-foot length, 48-inch beam, and 24-inch depth, equipped with a  $2\frac{1}{2}$ -horsepower outboard motor. The power-dusting outfit was made up of a hopper for holding the mixed dust, a small generator, a power dust-gun and hose and wiring attachments. One man operated the boat and the other handled the power duster. This outfit was employed on the larger ponds and lakes. The South Georgia Power Company operated a similar unit and also did hand-dusting on their body of impounded water. The application of Paris Green was made throughout the season of 1929, from May 16th until the latter part of September, when for several days high winds interrupted the work. In connection with this method of malaria control, the following should be emphasized:

1. All important *Anopheles quadrimaculatus* breeding places should be found and accurately mapped, if possible, before beginning control work.

2. Each batch of Paris Green should be thoroughly tested for its larvicidal power before general application, either in laboratory or in the field.

3. Thorough mixing of Paris Green and the diluent dust is essential. Mixing by hand as with shovel, spade, etc., is not depend-

able. Some type of mechanical mixing machine is essential.

4. Dusting equipment must be kept in good working order. (At least one mechanic should be employed in the organization.)

5. Trucks for transporting men and material should be so equipped as to provide tight compartments for the dust, and arrangements for holding dusting guns so as to prevent damage to them over rough roads.

6. Care should be exercised to select foremen and laborers who will apply intelligence in their work. This is work requiring "skilled labor", and they should be paid accordingly. The "duster" must constantly take advantage of air currents in order to apply the dust where required.

7. It was found that the most common error in dusting ponds and lakes was lack of attention to the shore-line. Repeatedly it was found that larvae escaped in shallow edges filled with fine flottage and decaying leaves or aquatic vegetation. A good rule is to direct the dust stream directly to the water's edge, and then raise the nozzle for allowing dust to drift to the more distant parts. (Dusting is best accomplished with wind velocity below five miles per hour.)

8. Each pond is numbered and a small signboard is nailed up at a convenient location, showing "Board of Health, Pond No. \_\_\_\_\_". On the map the same pond number is shown.

9. A "Foreman's Daily Report" blank is used. This shows the ponds treated, the time, amount of dust used, the approximate area covered, etc.

10. Checking on results of dusting is most practicable by the examination of resting places of adult mosquitoes, such as stables, occupied houses, hollow trees, etc. Larval checks should be made not earlier than four hours following the dusting, although killing usually begins within an hour after the dust application.

Costs.—The distribution of costs on the first season's operation (April 10-October 1) was as follows:

Salaries and wages.....	\$3,184.97
Transportation .....	1,456.31
Equipment .....	1,027.32

Materials .....	2,273.97
Incidentals .....	14.54
Total expenditures .....	\$7,957.11

*Results.*—It is too early to fully evaluate the control measures at this time. It may be stated, however, that owing to the fact that a close survey had not been made prior to the beginning of dusting operations, for the purpose of locating all important breeding places of *Anopheles quadrimaculatus*, many specimens of this species continued prevalent in several of the catching stations located in various parts of the county. There were 34 of these stations—barns, occupied houses, hollow trees, privies, barrels, fowl roots, etc. No records were available as to the degree of catches of imagoes in the stations (weekly catches) varied from zero in many stations to 616 (the highest single catch). Prior to the inauguration of dusting, it was estimated that on one occasion there were 5,000 *A. quadrimaculatus* resting in one mule stable. The following graph shows the relative numbers of *Anopheles quadrimaculatus* found at collecting stations in “controlled” and “uncontrolled” areas.

In April, 1930, a year following the initial blood index, and as a measure of results of the control efforts, blood specimens were taken from the pupils in the seventeen rural schools in the county. Comparing the blood index of 1929 with that of 1930, the following results are shown:

1929 Spring Index		
No. Examined	Positive	Rate
334	135	40.4
1930 Spring Index		
No. Examined	Positive	Rate
424	101	23.8

This shows a reduction of 16.6 per cent—a reduction not of a spectacular nature—for there was to begin with a high rate of chronic malaria. Total extermination of the vector would have left, of course, a great deal of malaria, which only treatment or natural recovery would have reduced. Aside from the anti-larval measures applied, no concerted effort was made to secure control by other methods, such as general quinzation, screening of houses, drainage, etc. There was some newspaper publicity designed to stress the

importance of treatment by the family physician, instead of resorting to drug store and self medication. During the winter months efforts were put forth by the County Health Commissioner, Dr. Hugo Robinson, to get known positive rural pupils to take quinine in the dosage called for by the so-called “standard treatment” with quinine. As it is felt that futher exact studies on the action of plasmochin are demanded before its general administration may be recommended, this agent has not been used in this program of control.

## THE TREATMENT OF HEMOGLOBINURIC FEVER\*

### Abstract

H. M. TOLLESON, M.D.

*Hahira*

There are a significant number of cases of hemoglobinuric fever in this section of the country, as evidenced by the occurrence within a few months of five cases in one community in South Georgia. The remedies used in the treatment of this condition are legion and none of them has proved of great value in reducing the mortality of the disease. The condition occurs usually in patients who have had recurring attacks of malaria and the presenting symptom is hemoglobinuria. In considering this symptom, which is the predominant one of the condition, it seemed in many respects to resemble the action of the streptococcus hemolyticus upon the blood stream. It seemed possible that the conditions might have certain features in common and that they might be so closely akin that a serum containing the anti-hemolytic streptococcus factor might prove beneficial. This serum is given in 20 cc. doses subcutaneously, preferably in the abdominal wall, using a different site for repeated injections. The administration is repeated at twelve to twenty-four-hour intervals for as long as seems indicated by the hemoglobin content of the urine or by actual

\*Abstract of paper read before the Medical Association of Georgia, Augusta, Ga., May 14, 1930.



extravasations of blood from the intestinal tract which sometimes occurs.

In the cases reported below there was a prompt diminution in the amount of blood pigment in the urine following the administration of the serum, leading one to deduce that it has a definite antihemolytic effect.

#### *Report of Cases*

Case 1. Henry L. White, American school boy, aged 10, was first seen on October 15th, 1929. During two weeks past he had had several chills, followed by a rise in temperature and had been given quinine sulphate by mouth in small doses at irregular intervals by his parents. On the morning of October 15th, he had a severe chill while at school. At 7 p.m. he voided one ounce of very dark red urine. At 10 p.m. his temperature was 101, pulse 120. He was nauseated and vomiting and had a decided yellow discoloration of his skin and sclerae.

He was surrounded by hot water bottles and given 10 c.c. antistreptococcic serum subcutaneously in the anterior abdominal wall. He was given 15 grains of quinine dihydrochloride intramuscularly. He was given one-half grain of codeine hypodermically and a small amount every few minutes of citrocarbonate in iced water. Hot turpentine stupes were applied to the flanks and abdomen and fluids were kept up freely in an effort to encourage elimination from the skin and kidneys. The vomiting was promptly checked and did not constitute the usual severe symptom. A three grain dose of calomel and wintergreen was given on the second day in the hospital. Digitalis in the form of the tincture in 5 minim doses was begun. The infection of anti-streptococcic serum was repeated three times during the next three days in doses of 10 c.c., 20 c.c., and 20 c.c. respectively. The hemoglobin content of the urine varied inversely as the dosage of serum given. The icterus became most profound on the second day in the hospital and gradually decreased in about four days to a pallor from the anemia. The temperature fluctuated between 97 and 101 for the first five days when it rose rapidly to 105, accompanied by an extensive urticaria, both the result of a serum reaction.

On October 21st, six days after the appearance of the hemoglobinuria, a blood examination showed hemoglobin 45 per cent; R.B.C. 1,630,000; W.B.C. 5850; Polymorphonuclears, 70 per cent; small lymphocytes, 29 per cent; large lymphocytes, 1 per cent. No malarial parasites were found.

The spleen was definitely enlarged at the onset of the hemoglobinuria, increased in size during stay in hospital, then gradually decreased until it was barely palpable three weeks after onset.

The patient was kept at absolute rest in bed for thirty days following the appearance of the acute symptoms to allow time for the regeneration of red blood cells and as prophylaxis against a possible cardiac paralysis which sometimes occurs in these cases. At the present time this patient is observed from time to time and he has still a very poor heart action and

upon over-exertion he experiences a sensation of giddiness.

Case 2. B. S., white, American school girl, aged 15, well developed, well nourished was seen for the first time at 8:30 a.m. on October 10, 1920. The patient had begun vomiting at 5 a.m. the same morning, and after the first few minutes began to vomit blood-stained material. She had also passed rather large amounts of red stained watery stools.

During the past few weeks her parents had administered small doses of quinine at irregular intervals. A blood smear revealed numerous malarial parasites of the Estivo-autumnal type. At about 8 o'clock the patient had voided six ounces of urine showing a definite hemoglobinuria. The skin and sclerae exhibited the lemon yellow of hemoglobinuric fever. The temperature was 100, pulse 108, respiration 24. Twenty c.c. of antistreptococcic serum was given subcutaneously and the general treatment already mentioned was instituted. After four hours the patient's urine was clear, the stools contained no blood, the vomiting had subsided and the patient was fairly comfortable. On the second day, malarial parasites were again demonstrated in the blood, and quinine therapy was instituted as for an ordinary case of malarial fever, a careful check being made of urine and stools for the appearance of hemoglobin and blood. Further antistreptococcic serum was unnecessary.

Case 3. Mrs. M. L., white, American housewife, age 40, was first seen on September 17, 1929. She had had chills followed by fever at short intervals for about thirty days and had had no treatment except occasional doses of calomel and salts. She had just recovered from a severe chill and her temperature was 104. A blood smear revealed numerous malarial parasites. Quinine sulphate in 10 grain doses three times a day was prescribed and three grains of calomel was given. The next day the patient's temperature was normal and she felt much better. On September 19, three days from the first visit, she became nauseated, vomited, and passed a small amount of very black urine. This patient vomited for eight hours, became profoundly jaundiced, and was critically ill.

The same treatment for the vomiting and elimination was given as described in the other cases.

The patient was given three injections of 20 c.c. antistreptococcic serum at 12 hour intervals, with a prompt diminution in the hemoglobin contents of the urine after the first, and its disappearance after the second dose. The third dose was given as a prophylactic measure against further hemolysis.

Case No. 4. Mr. D., white, American farmer, aged 24, seen in consultation on February 5, 1930. He had voided three or four specimens of very dark urine, the last, at noon on the above date being black and almost opaque before a bright light. He had had occasional chills with inadequate quinine administration. Malarial parasites were demonstrated in the blood. The same treatment as in the other cases was instituted without delay with the same gratifying results.

The urine cleared rapidly in direct proportion to

the administration of the anti-streptococcic serum. The urine cleared progressively to a straw color in about 48 hours and the icterus disappeared in about six days.

In this case digitalis was given in the form of digalen intramuscularly on account of the vomiting, as was also the quinine given intramuscularly.

### Summary

In the treatment of blackwater fever absolute rest in bed for a period prolonged for some time after the acute symptoms have subsided is of paramount importance.

Early and thorough alkalinization and an abundance of fluids by mouth when possible and by rectum and subcutaneously when necessary will control the vomiting and dilute the toxins formed from the destruction of the red blood cells within the blood stream.

Counterirritation to the flanks and abdomen, external heat and a purge of calomel and a saline are indicated.

Due probably to the similarity in the effect between the toxins liberated by the malarial parasites and the action of the hemolytic streptococcus on the blood stream, prompt administration of polyvalent anti-streptococcic serum arrests the hemolytic process which is the most frequent cause of death.

Careful tonic treatment during the convalescence, with frequent checks on the heart action and an abundance of highly nourishing food, will insure an uninterrupted recovery.

## DISCUSSION SYMPOSIUM ON MALARIA

*Dr. Ernest F. Wahl*, Thomasville, Ga.—On reviewing the rather voluminous literature on the subject of hemoglobinuric fever, one is struck by the inconsistency of therapeutic results. Many recoveries are reported from therapeutic agents which vary considerably in character. On the other hand, a form of treatment which has given 50 per cent "cures" in one series of cases may be 100 per cent unsuccessful when tried by another physician.

Anti-streptococcus serum has been used in the treatment of hemoglobinuric fever by many practitioners in Mitchell, Baker, and Colquit counties for several years. Four years ago a physician in Mitchell County, who has a large practice in a malaria infected section, stated that he obtained excellent results with this form of treatment. At the present time he has discontinued the use of serum because of the lack of favorable results.

My experience with blackwater fever has been limited to cases seen in consultation in South Georgia

and North Florida. These patients had been previously treated either with anti-streptococcus serum or by keeping them intoxicated with pure ethyl alcohol. Neither method was very encouraging. However, I wish to add that the supportive phase of the treatment recommended by Doctor Tolleson was in most cases neglected until late in the course of the disease. Death seemed to be hastened in one of my cases by a blood transfusion and the donor had not recently taken quinine. In view of the recorded cases of a recurrence of the hemoglobinuria precipitated by quinine when parasites were found in the blood after the first attack had cleared up, it seems advisable to start quinine in small doses and gradually increase the amount when it is indicated. I have had no experience with plasmochin compound in blackwater fever.

Since most of the fatal cases I have seen died in uremia, I am inclined to favor sodium bicarbonate and glucose intravenously as advocated by the English, until we are sure of having something better. It is quite possible that Doctor Tolleson may furnish us what we seek.

Doctor Miller has presented in a very comprehensive manner the use and action of plasmochin compound. I wish to present a somewhat different phase of this subject but in doing so do not wish to detract from the value of this drug. It is unfortunate that the profession was misled in the dosage of plasmochin compound. This has caused many physicians to abandon a drug which is valuable if properly used. I have not been successful in curing acute malaria with plasmochin compound alone. I do not believe that plasmochin compound improves our immediate clinical results, but that its real value is shown by the end results which are obtained by eradicating malaria carriers. Plasmochin is a new weapon in the treatment of benign malaria in individuals who are sensitive to quinine. I have seen a great number of patients who were incapacitated more by the resulting methaemoglobinemia when given as recommended by the Winthrop Chemical Company than they were from malaria.

Acute hepatitis is a complication of plasmochin therapy which is not to be taken lightly. Many of the cases I have seen resulted from administration of the drug over periods of months with or without intervals of rest. However, I have recently had a patient with acute malaria who was otherwise strong and robust. She was given 15 plasmochin compound tablets, each containing 0.01 gm. of plasmochin, over a period of three and a half days. She developed acute hepatitis which made it necessary to hospitalize her for three weeks. In other cases which resulted from prolonged administration of the drug, liver damage was extensive and persisted for weeks.

Since the report of Deeks at the meeting of the Southern Medical Association last November, I have given only half the recommended dose. At present I start my patients on quinine twenty grains daily and one plasmochin compound tablet three times a day for four days. When the temperature becomes normal, the quinine is reduced to a daily dose of ten grains and



continued for fifty days. The plasmochin is repeated the following week. The results are satisfactory and no untoward symptoms appear.

**Dr. T. F. Abercrombie**, Atlanta, Ga.—We have had three fine papers and I will confine my remarks chiefly to malaria as a public health problem.

Malaria has been considerably on the increase for the last five years and is probably the greatest public health problem we have today. In the years 1925 and 1926, we struck a level and thought we were getting along fairly well in malaria control, but you will remember those were very dry years and we had little rainfall. During the first three months of this year the death rate showed an increase of 26 per cent, and the morbidity reports for this period show an increase of 106 per cent over the first three months of last year.

Doctor Griffiths told you what Dougherty County is doing. Other counties are putting on control programs, but the thing we need to do is to put on a concerted effort throughout the State for the control of this disease. In 1926 and 1927, it was centered in the central part of the State more than anywhere else. Now you will see on the chart that it is rapidly spreading to the eastern part of the State, and an interesting thing is that it is shifting from the southeastern part of the State to the north and west.

In conclusion I wish to say a few words about treatment, and the plea I wish to leave with you is to treat the patients until they are no longer carriers. If we can do that, we can do a great deal toward controlling malaria, whatever the treatment is. If plasmochin is the thing that will do this, let us use it; if quinine, let us use that, but treat all patients until they are no longer carriers.

**Dr. S. H. Haddock**, Augusta, Ga.—Being more or less a health officer, I have had no occasion to treat blackwater fever or to use plasmochin, but the results claimed by Doctor Miller are interesting. If similar results can be obtained in a large series of cases, the drug will be valuable in malaria control work. The paper which Doctor Deeks of the United Fruit Company presented at the last session of the Southern Medical Association seems to be in accord with Doctor Miller's experience, but Doctor Deeks mentioned that malaria control cannot be carried out effectively by the use of plasmochin and quinine alone, as this was given a thorough test by his staff, so, apparently, we are not yet ready to dispense with drainage, Paris Green dusting, and screening, in our control work.

Further in regard to hemoglobinuric fever the idea seems to be prevalent among the laity that the use of quinine for several weeks or months is followed by hemoglobinuric fever. Down in our section many people are afraid to take quinine for more than two or three weeks. Quite a number of physicians over the State have apparently assisted in spreading this belief, to the very great detriment of control work by quininization, and I mention this in the hope that those present will do everything possible to remove this fear from the minds of the people. To my knowl-

edge there has never been a case in our section where the administration of quinine daily over a period of sixty days was followed by hemoglobinuric fever. In practically all of these cases, however, there is a history of intermittent administration of the drug over a period of weeks or months.

Apparently excellent results have been obtained by Doctor Griffiths and his co-workers in the use of Paris Green. I used it on a small scale in Jenkins County last year and found it to be an excellent larvacide, as verified by Anopheline larval checks two or three days following the dustings. The dilution used was that recommended by Doctor Griffiths. I believe, as he has told us, that there will be no spectacular reduction in malaria as the immediate result of such measures, especially where there is a relatively high rate of chronic malaria. However, this is not well understood by the average layman, and an educational program will, of necessity, have to be undertaken in the malaria districts before control work can be carried out on a county-wide or State-wide basis. Until such educational work is done, the sentiment of the people will not permit sufficient taxation to finance control work on an extensive basis. I believe the only effective way to build up sentiment is by the establishment of a health unit in each county, with a properly qualified health officer who will constantly hammer into the people the facts concerning malaria. No sporadic efforts will avail. I say this because in my own limited experience in Jenkins County, I believe that today, sentiment toward the spending of money for malaria control work is decidedly more favorable than when the health unit was established a year ago.

**Dr. C. K. Sharp**, Arlington, Ga.—For the past thirty years this pernicious and often fatal manifestation of malaria has been a nightmare to me. The mortality has been alarming. All methods of treatment have not influenced the death rate, which I roughly estimate at 60 per cent. Little has been published regarding the pathology of this disease to guide us as to treatment and it is a great satisfaction that some cognizance has been taken of it. An effort to establish a rational specific treatment is being made and anyone who accomplishes this should be classed with the immortals. I have seen cases of hemoglobinuric fever that I think could have been saved by transfusion. Death in many instances seems to have been due to air hunger or loss of the oxygen carrying power of the blood and transfusion would have been of much assistance in these cases, I am sure.

**Dr. Mark S. Dougherty**, Atlanta, Ga.—I wish to report a case of plasmochin poisoning. A middle aged lady came in deeply cyanosed after having taken fourteen tablets of plasmochin and five grains of quinine with each tablet over a period of three days. She complained of severe epigastric pain, nausea and incessant vomiting. She had a hypoglycemia, the blood sugar being 83 milligrams. She had a slight retention of nitrogenous products in the blood. The urine contained many casts, pus cells, red blood cells and urobilin.



The clotting time of the blood was prolonged. She complained bitterly of epigastric pain and had two or three gastric hemorrhages. She cleared up on a treatment of intravenous glucose, alkalies and forcing fluids. Plasmochin is a valuable drug, should be given in small doses and the physician should keep the patient under careful daily observation and discontinue the drug on the slightest evidence of poisoning.

**Dr. Joseph D. Gray**, Augusta, Ga.—I have always thought that perhaps the best treatment for hemoglobinuric fever would be transfusion. My experience is very limited with it. I wish to call attention to a report in the Bulletin of the United States Fruit Company in 1926, over twenty cases of this disease were treated by hemostatic serum Lapenta (Parke, Davis & Co.).

**Dr. R. L. Miller**, Waynesboro, Ga. (closing)—After completing my paper and mailing a copy of it to the gentlemen who were to lead in the discussion I had the pleasure of reading in the Journal of the Southern Medical Association the recent paper by Doctor Deeks, and also an abstract of a foreign paper in the Journal of the American Medical Association in which very much smaller doses of plasmochin were advocated than we were using. Since then it has been my misfortune to treat a young lady who came home with acute malaria. She had an idiosyncrasy for quinine, and I used one-half the dose of plasmochin recommended and was successful in relieving the patient with plasmochin alone.

I think that hemoglobinuric fever is never caused by quinine, but by lack of it at the proper time. I have had no experience with the use of serum in hemoglobinuric fever, but in the cases I have had the misfortune to treat I am sure Doctor Tolleson is eminently correct in keeping the patients perfectly quiet, using an opiate if necessary, with copious amounts of fluid. In the future, if I ever treat another case, I will try the serum.

I would not have anyone for a minute credit the idea that I am advocating the supplanting of quinine with plasmochin in the treatment of malaria. I do not think this ever will, or ever should be done. I am, however, urging that we combine the use of plasmochin with quinine in the treatment of malaria so as to be sure that the blood is free of the sexual forms of the parasite, thus reducing the incidence of the disease.

**Dr. J. A. Redfearn**, Albany, Ga. (closing)—I wish to make one point that I think should be brought out. I think we should never speak of malaria without mentioning Doctor Bass, who put out the standard treatment.

I used plasmochin in 1928 with a great deal of interest and felt as if I was getting somewhere. During the following winter we had a board of health meeting in Albany and Doctor Bass was present and addressed us. The point was brought up about destroying the gametocyte and we felt that was the chief point. Doctor Bass' reply to that was that they all died, any way, in two or three weeks whether

given plasmochin, quinine, or anything else or not, and I think that is the point we should carry home with us.

**Dr. H. M. Tolleson**, Hahira, Ga. (closing)—I firmly believe that if in a case of hemoglobinuric fever one gives that patient antistreptococcic serum, and nothing else, the patient will die. I thank Doctor Wahl for emphasizing what I brought out in the paper, that this serum is only one of the methods of treatment.

The three causes of death are (1) exhaustion from the hemolysis of the blood; (2) suppression of urine, and (3) cardiac paralysis. If we do not check the hemolysis and institute adequate treatment to prevent the suppression of urine, as well as take measures to prevent cardiac failure, we cannot hope to accomplish much, but I think in most cases where the patient is not in very poor health prior to the illness such measures will restore that patient to normal. I have not had a recurrence among my cases. The last case occurred in December and the others in October and November of last year.

#### CONTROL OF BARBITAL ANESTHESIA AND POISONING BY DIURESIS

While using barbitalized dogs in some work on hyperglycemia, Carl A. Johnson, Arno B. Luckhardt, and J. A. Lighthill, Chicago (*Journal A. M. A.*, August 23, 1930), were struck by the apparent rapid recovery of these animals as compared with others not receiving large quantities of dextrose solution. This led to the use of diuretic measures in one clinical case of attempted suicide with barbital, and to the experimental work reported. A typical experiment consisted of a control experiment in which the recovery time was determined following the intravenous injection of 225 mg. of soluble barbital per kilogram. After an interval of from ten to twenty-four days the same dose of soluble barbital was given to the same dog and this was followed in one or two hours by 1 liter of 10 per cent dextrose solution given intravenously and the recovery time was noted. After another interval of from ten to twenty-four days a second control experiment similar to the first was performed in which soluble barbital was given without a subsequent intravenous injection of dextrose. Those dogs receiving 1 liter of 10 per cent dextrose solution following the barbital injection, the recovery time was reduced, in most dogs, to less than one-half. Gower and Tatum suggested that, on the basis of the excretion of barbital in the urine, the most rational means of treatment of acute barbital poisoning is to maintain optimum renal function. The authors feel that their experimental work supplies proof for the usefulness of this method of treatment in cases of poisoning with barbital and other barbituric acid compounds.

The Southern Medical Association will meet in Louisville, Ky., Tuesday, Wednesday, Thursday, Friday, November 11-14, 1930.

## ACUTE POLIOMYELITIS\*

Harold I. Reynolds, M. D.  
Athens

We have been accustomed to think of poliomyelitis in terms of paralysis. Until recent years the diagnosis was not made until paralysis made its appearance. Since the only permanent disabling feature of the disease is paralysis, the object of treatment should be to prevent it. Obviously if the diagnosis is not made until there is paralysis nothing can be done from a preventive standpoint. It is claimed that from 30 per cent to 60 per cent of cases occurring during epidemics do not become paralyzed; therefore there is a pre-paralytic period during which diagnosis is possible and should be made. It may be said here that sporadic cases are often very difficult of diagnosis unless the disease is kept in mind, and even then spinal fluid examinations will probably be necessary in order to make a positive diagnosis. Cases as definite as the one I shall report should offer no difficulty, but all cases are by no means so definite. The bulbar type, the so-called fatal type, is easier of diagnosis than the spinal, the symptoms being far more spectacular. This paper is presented not to offer anything new about poliomyelitis, but in the hope that it will stimulate effort on the part of all of us to diagnosis and treat poliomyelitis during the preparalytic stage of the disease. Herein lies the only hope of saving many children from a life of invalidism.

*Etiology*

Poliomyelitis has been definitely proven to be caused by a filter passing, ultramicroscopic virus. It has been transmitted, by Flexner and his associates, through hundreds of monkeys by injecting intracerebrally a bacteria-free suspension of poliomyelitic tissue. At first large amounts of the suspension were required to reproduce the disease, but after four or more passages as little as 1/500000 gm. was sufficient. This could only mean that after injection the virus multiplies, otherwise such a small amount could have no effect. According to Amoss, the

virus is susceptible to drying, to sunlight, to hydrogen peroxide, to mercuric chloride and chlorine, but not to phenol.

Flexner and Noguchi isolated a minute globoid body from poliomyelitic tissue, and Flexner, Noguchi, and Amoss succeeded in producing typical experimental poliomyelitis with cultures of globoid bodies injected intraspinally and intraperitoneally. However, Amoss says the relation of the globoid bodies to poliomyelitis remains unproved. Rose now has recently reported, for the first time, the isolation of a streptococcus from the spinal fluid of living persons with poliomyelitis, and he says that it is probably related to the globoid bodies described by Flexner and Noguchi. He has prepared an antistreptococcus serum and used it in the treatment of a large number of cases. I shall have more to say about this later.

*Epidemiology*

Sporadic cases have been reported from all parts of the world, and there have been many outbreaks of epidemic proportions in this country, notably in Vermont, New York, Wisconsin, Pennsylvania, Minnesota, Michigan, Virginia, Nebraska, Massachusetts, and recently in Maryland. The epidemic of 1916 originating in Boston and in Brooklyn and traveling through New England and the Middle States affected some 30,000 people. It is a warm weather disease of cold climates, all epidemics having started during the summer months. The South has experienced no large outbreaks. The only susceptible animals are man and the ape, and the most susceptible age period in man is between two and ten years, although about 73 per cent are under five years of age. In urban communities relatively more adults are attacked. The disease is highly communicable, but the attack rate is extremely low, only 1-200 even in large epidemics. This is explained by the probability that most individuals undergo a gradual immunization. It is said to be rare that a case can be traced to direct contact. Carriers probably play the greatest role in the propagation and spread of the disease.

The incubation period is from three to eighteen days, the majority from seven to eleven days. It is communicable from at least

\*Read before the Medical Association of Georgia, Augusta, Ga., May 14, 1930.

six days before symptoms appear to about ten days after the onset. This latter period is uncertain. In this respect it resembles measles and from a public health viewpoint the prodromal stage is more important than the acute. It is doubtful that preventive measures, except isolation of the acute case, are at all effective. The virus gains entrance and leaves the host by way of the nasopharynx. Some claim that it may enter intravenously, subcutaneously through infected bites and abrasions (Ayer), or that it may enter as does the tetanus bacillus along the nerve sheath, or through the gastro-intestinal tract. Amoss has been unable to produce poliomyelitis by feeding large amounts of tissue over a long period of time.

Why is the attack rate so low? Amoss says there are two lines of defense: 1. Acquired immunity; 2. Natural resistance. Acquired immunity is explained by subinfective implantation of the virus. Natural resistance consists of (a) the neutralizing power of the nasal secretion, (b) impermeability of the nasal mucosa, and (c) the meningeal-choroidal complex. Just here it may be noted that nasal douches and antiseptic spraying of the nose wash away the nasal secretion and increase the permeability of the nasal mucosa and thereby, instead of decreasing susceptibility, actually increase it. The following experiment is cited by Amoss to explain the meningealchoroidal complex. A pledget of cotton soaked with a suspension of poliomyelitic tissue was placed in the nose of a monkey and left there two hours; nothing happened. Now the monkey was given intraspinally some aseptic horse serum, and twelve hours later a similar pledget of cotton placed in the nose. The monkey developed poliomyelitis. The horse serum had set up an aseptic inflammation of the meninges, thus rendering the monkey more susceptible.

#### *Pathology*

The pathology will not be discussed except to say that the name poliomyelitis is really a misnomer. A better definition would be that of Gordinier's. He defines it as a meningo-myelo encephalitis with a specific ultramicroscopic "globoid" body or virus as

the probable cause. This virus has a special predilection for the cells of the ventral gray columns of the spinal cord, the bulbo-pontine cranial nerve nuclei, the cerebral and cerebellar cortex, and rarely the peripheral nerves. "The type and character of the motor symptoms are entirely dependent upon the longitudinal extent and exact situation of the pathologic lesion."

#### *Symptomatology*

Poliomyelitis usually begins with general symptoms. Some claim that it is always a general infection, others that it is not. My patient began with generalized aching, followed three days later with fever, headache, and vomiting. In children irritability, loss of appetite, vomiting, sore throat, and fever are the usual initial symptoms. Convulsions are very rare. Vomiting occurs only once or twice and is attributed, as a rule, to dietary indiscretions. There is sometimes diarrhea, but the rule is constipation. The patient, if old enough, complains of headache, or in the absence of headache severe backache or pain in the back of the neck and between the shoulders. The temperature range is from 100 to 102½ degrees. The pulse is usually rapid and out of proportion to the temperature. The patient is drowsy, but easily aroused; the sclerae are dulled, the face flushed, and the skin of the face has a "glazed" appearance. A decided intention tremor of the hands and lips is usual, and swallowing is difficult. Local or general sweating is usual. Retention of urine is common. Probably the most characteristic physical signs of poliomyelitis are the stiffness of the spine and neck, the general appearance and attitude of the patient, and the fact that prostration is greater than the temperature would lead one to expect. At some time during the course of the disease the reflexes are disturbed in one way or another. The blood count is moderately increased. The spinal fluid is under increased pressure, appears clear, and contains on an average two to four hundred cells. At first these cells are polymorphonuclear, but very soon small round cells predominate. The globulin content is increased.

Most of the symptoms above enumerated



may be present before there is any paralysis or weakness of muscles, and diagnosis should be made in this, the preparalytic, stage of the disease. There is a type of the disease that occurs especially during epidemic periods which gives a history of a gastro-intestinal upset three to ten days prior to the real attack. This is the dromedary type, so-called because of its two "humps" of fever. Paralysis, when it occurs, is of the flaccid type and makes its appearance in about three days.

### *Treatment*

Until recently there was no treatment other than symptomatic and orthopedic. At present convalescent serum is being used with apparent success. Its use is indicated prophylactically and therapeutically.

Shaw and Thelander report eighty-one cases, forty-three of which were treated by intramuscular injection of convalescent serum. They favor the intramuscular route because when serum is not at hand citrated whole blood may be used, and furthermore either may be given without harm when the diagnosis is uncertain, where as intravenous or intraspinal treatment would necessitate delay and might actually be harmful. Their results were as follows: The forty-three cases were treated from as early as one hour after the onset of symptoms to as late as five days; twenty-four of these were paralyzed at the time of treatment, but only thirteen showed persistent paralysis and these were all treated after forty-eight hours. Of the seventeen treated during the first forty-eight hours, two were paralyzed at the time, but none persistently so. Of the thirty-eight cases receiving no serum, thirty-three were persistently paralyzed.

Aycock and Luther treated one hundred and six patients during the first four days with convalescent serum intraspinally and intravenously. Sixty-four per cent of these developed paralysis, and only 5.7 per cent a severe grade of paralysis. According to these authors the treatment with convalescent serum is based on the following facts:

1. Poliomyelitis confers a lasting immunity.
2. The blood serum of persons and

monkeys who have had the disease neutralizes the virus.

3. Convalescent serum tested experimentally exerts protective action against the virus.

The blood serum of adults not known to have had the disease often neutralizes the virus. All observers are agreed that the amount and severity of the paralysis depends upon the interval elapsing between the onset of symptoms and the time of treatment.

Riley reports on the epidemic that occurred in Maryland in 1928. Three hundred cases were definitely diagnosed as poliomyelitis. Dr. George P. Berry treated forty-nine cases in the preparalytic stage with 92 per cent recovering entirely. He treated thirty-six cases shortly after the onset of paralysis with 40 per cent recovering entirely. Of one hundred eighty-four untreated cases all but fourteen developed paralysis with 30 per cent recovering. Mortality in the bulbar group was reduced from 70 to 10 per cent.

Kellogg gives a critical analysis of the value of convalescent serum treatment. He says there is no absolute scientific proof that the treatment is of value, but from his study he believes it to be of great value. If exactly parallel series of cases could be run it would be easy to determine the value of the treatment. It is a fact, however, that many cases do not develop paralysis without treatment; also it is known that the rate of occurrence and severity of paralysis varies at different times and in different localities, in the same epidemic. For these reasons any treatment is open to criticism.

The best route of administration is believed to be intraspinal and intravenous. The method is as follows: In the suspected case preparation is made for lumbar puncture; all necessary laboratory supplies for doing cell count and globulin test are at hand, as well as the convalescent serum. Diagnostic tests are done at the bedside. If these confirm the diagnosis, 20 cc. of serum is injected intraspinally and at the same time 50 cc. or more intravenously. Twelve hours later the serum is repeated if the patient still has fever. The dosage of serum depends more upon the amount available than upon

any other factor. There is no method of standardization at present.

In the Maryland epidemic of 1928 the treatment instituted was absolute rest in bed, intraspinal and intravenous convalescent serum, and as soon as the diagnosis was made an orthopedic surgeon was called in consultation and remained in attendance until the patient was rehabilitated. They were also most fortunate in that many of the cases were hospitalized.

For the details of selection of donors, collection of blood, and preparation, sterilization, and preservation of the serum you are referred to the article by Aycock, Luther, and Kramer, in the *Journal of the A. M. A.*, volume 92, page 385. One has only to read this article to see readily that it is practically impossible for any physician not practicing in a medical center ever to use convalescent serum in the treatment of poliomyelitis. It occurs to me that the disease is of such importance and the serum has proven to be of such great value that State Boards of Health should take steps to make the serum available to all physicians.

The only other treatment that seems to offer hope is that of Rosenow. Recently he reports the use of antistreptococcus serum, as prepared by him, in a group of one hundred fifty-eight cases. Twenty-one of these he saw; the other one hundred thirty-seven were sent serum. This was always given intramuscularly. Heretofore the objection to antistreptococcus serum has been the reactions that have occurred about ten days following injection, but these have been largely eliminated by concentration of the serum. Fifty cases were treated during the first two days with two deaths and only one residual paralysis of a slight degree. There was no paralysis at the time of treatment. The other one hundred eight showed some degree of paralysis when treated; twelve died and ninety-four recovered. There was residual paralysis in forty-five, but only ten were paralyzed to a marked degree. Rosenow concludes that the results obtained compare favorably with those reported by Aycock and Luther from the use of convalescent serum, and that further trial of properly pre-

pared serum in concentrated form is indicated.

#### Case Report

A young man about 20 years old was admitted to the Crawford W. Long Infirmary Wednesday night, September 18, 1929, at 11 o'clock complaining of headache and nausea. He became ill with generalized aching on the Sunday night preceding, while en route from his home near Brunswick to Athens. Upon arriving in Athens he went directly to his room, where he remained most of the time except to go to two or three meals at the college dining hall. On Wednesday he was examined physically at the infirmary, but at the time made no complaint and nothing abnormal was noted by the examining physician. That night he was admitted. When he came in, according to the nurse, he was "jerking all over". The temperature was  $99\frac{1}{2}$  degrees. He vomited once. The following morning the temperature was 100; in the afternoon 101. The temperature Friday morning was  $101\frac{1}{2}$ , Friday afternoon  $102\frac{1}{2}$ ; Saturday morning  $100\frac{1}{2}$ , Saturday afternoon 100, and on Sunday morning  $98\frac{1}{2}$ , after which it remained normal.

Physical examination Friday morning showed the patient lying in bed flat on his back, unable to turn or sit up alone. His head was drawn back, and there was definite retraction and stiffness of the neck. He had pain only when he tried to move, and complained only of feeling very badly. His respiration were shallow, and his color a bit cyanotic. Swallowing was difficult and speech of a "jerky" character. His expression was anxious. The slightest effort on his part caused profuse perspiration and there was marked intention tremor of hands. When helped to a sitting position on the side of the bed he could not remain there unless he placed his hands on the bed behind him, his spine being decidedly stiff. His reflexes were apparently not disturbed except for some stiffness of the hamstrings. He was not able to raise his right arm to a vertical position, showing that the muscles of the shoulder girdle were weak. Upon admission the white blood count was 8,500, the next day it was 12,500. Lumbar puncture was done Satur-

day morning. The fluid was under considerably increased pressure and showed a cell count of 200. It appeared clear. The type of cell was not noted, nor was a globulin test done. A diagnosis of acute poliomyelitis was made.

A week or ten days previously, the patient and his younger brother had drunk water from the same bucket after a friend of theirs. It was discovered that this friend had become ill with a similar condition on the following day. The patient and his younger brother were stricken on the same day about ten days following this exposure. Reliable reports indicate that the younger brother also had poliomyelitis. I do not think the water was at fault, but that this is a definite instance of contact infection, the patient and his brother having come in contact with poliomyelitis during the incubation period.

My patient recovered, but when he left for his home he had paralysis of the muscles of the right shoulder girdle. Recent advice indicates that this is improving. He had no treatment other than symptomatic, and if I had a patient with poliomyelitis today I could do no more than that; because by the time convalescent serum, whole blood, or Rosenow's antistreptococcus serum could be obtained it would likely be too late to benefit the patient. The sporadic case is important, so why is it not possible for State Boards of Health to make provisions whereby some form of specific treatment will be quickly available to every sufferer with poliomyelitis?

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#### DISCUSSION ON PAPER OF DR. REYNOLDS

*Dr. C. C. Hinton*, Macon, Ga.—There is very little that I have to add in addition to what Doctor Reynolds has told us. He has gone over our knowledge of poliomyelitis up to the present and has reviewed about all that is known concerning this disease. The fact that something can be done by diagnosing these cases in the preparalytic stage gives us not only a hope but an enormous responsibility, for it puts it up to us to decide in which cases of malaise, fever headache, and more or less stiffness of the spine we shall be justified in doing spinal punctures to make a conclusive diagnosis. I think this is all the more important when we realize that a large number of infectious diseases are septicemias, that we have micro-organisms of all types in the blood, and that in doing a spinal puncture there is some danger that we might carry over some of the infection from the blood stream and institute infection, that otherwise would not have taken place in the nervous system.

One thing Doctor Reynolds did not have time to read in his paper was that there is a mortality of from 10 per cent to 40 per cent in poliomyelitis. If these cases reported elsewhere were diagnosed by spinal puncture in the preparalytic stage we will have to assume that some of the patients would not have had any trouble anyhow, but the fact that the bulbar cases were reduced in mortality from 70 per cent to 10 per cent is evidence that by convalescent serum treatment something was gained.

As Doctor Reynolds said, most of us would be unable to give these patients specific treatment. It occurred to me in connection with some articles which have appeared from time to time on Pregl's iodine solution in the treatment of this disease, where it was given through the carotid artery to get it directly to the brain, we might prevent these bulbar cases. I think it might have possibilities in the line of treatment of poliomyelitis as well as in the treatment of purulent meningitis, in which it is used. I know little of Rosenow's serum, but think he has isolated streptococci for almost every disease. It would not be proper for me to question his results, but he does seem to be rather ingenious.

*Dr. Lewis M. Gaines*, Atlanta, Ga.—I wish to discuss Doctor Reynolds' excellent paper in respect to three particular points. First, the matter of diagnosis. In sporadic cases of poliomyelitis the diagnosis may be fraught with considerable difficulties. As you heard him describe the cases he had, one could well think of several other possibilities, particularly meningitis, and encephalitis, as well as poliomyelitis. In order to make an early differentiation a spinal fluid examination is without doubt an essential procedure. Having obtained the spinal fluid, there are still certain questions which may arise in the interpretation of the findings. One examination of the fluid in poliomyelitis in the earliest stages, perhaps in the first twenty-four hours of the illness, might give negative findings.



It is only after the onset of meningitic symptoms, as shown by the stiffness of the neck and other manifestations, that one obtains the pleocytosis. When the spinal fluid is first examined the cells may vary considerably in number, in a group of cases reported by Peabody there were anywhere from thirty-four up to 1,980. These cells are of the polymorphonuclear type, although some question has been raised as to whether they are wandering cells. At any rate, the finding of these cells is definite evidence of the disease. If the test is sterile in result we may conclude that we are dealing with poliomyelitis or possibly encephalitis. I think the important thing to remember is the value of spinal fluid examinations, and the repetition of the test if inconclusive.

Second, with regard to incidence of this disease in this State, I am informed that in 1929 in Georgia there was reported a total of twenty-four cases. Of course we realize that all cases were not reported so we will have a reasonable figure on mortality in grading the morbidity. This year only three cases have thus far been reported. While not a problem with us at present we have no guarantee that it will not be in the future.

In regard to treatment, from California, Maryland, and other States have come reports of the great advantage obtained from giving convalescent serum, and the prevention of paralysis makes this worth while. Unfortunately, there is no place from which we can obtain this serum in Georgia. So far as I know it is not furnished commercially. It is furnished in New York State by the Board of Health, for they have a constant supply of convalescents. After three weeks this serum is diminished in potency, but still retains some potency. Fortunately, we have in Georgia, at Warm Springs, a place where there is a considerable and constant supply of convalescents. I think we could obtain from other States a supply of convalescent serum which would keep for a year, and could thus have available to the physicians of the State a supply of the serum that might save life or prevent permanent disability.

*Dr. Theodore Toepel*, Atlanta, Ga.—I am very glad Doctor Reynolds has brought this important subject to our attention. As was mentioned, we had only twenty-four cases of poliomyelitis reported in Georgia last year, but we cannot tell when an epidemic may strike our State. We must acquaint ourselves with the importance of the prevention of this disease. The method of transmission is still obscure. Flexner and Rosenow both claim that convalescent serum is efficient, but neither of them will make any statement as to how it acts. It is peculiar how modest these men are in their claims. Rosenow says to use convalescent serum in the first twenty-four hours and it will prevent paralysis. If our State Board of Health will furnish us with this serum it will be of great importance. When paralysis has reached the stage where we have the flail joints, the case becomes an orthopedic problem and not much can be done except to stabilize the joints.

Warm Springs is a good place to send patients for treatment with the water, but it is not really necessary to send patients away for such treatment. If, for financial reasons, it is not possible for them to go to Warm Springs, a tub may be installed in the patient's home and they may have the restorative exercises there. This could be done without much difficulty, for the main thing is to restore the muscle power with the support of the water.

*Dr. Henry Michel*, Augusta, Ga.—I see cases of poliomyelitis only after the paralysis has occurred. I have a profound admiration for the pediatricians and clinicians who are able to diagnose these cases in the first twenty-four hours. I think this is very difficult. When the patients come to me the diagnosis is already made because they are paralyzed.

One thing I wish to stress is that in the beginning stage of paralysis there is only one method of treatment and that is absolute rest. The more of these cases I see and the more experience I have the more I am convinced of this. The first time I see one of these patients I put on a plaster cast and keep him absolutely quiet until we see that nature is restoring the muscle. The only good thing about this dreadful disease is that there is a tendency for the patients to improve during the first two years.

The point about putting them up in plaster is that the stretching of the muscles is prevented and when the tonicity begins to come back these muscles have a better chance to recover. After a year or two of simple immobilization, then comes the time Doctor Toepel was talking about. That is, exercise in the proper way. In the beginning of the disease, the use of electricity is only a waste of time. Perhaps the most valuable exercise is that which is carried out under water. There is no advantage in sending these patients to Warm Springs or to any of the European spas. The reason we put them under water is because the buoyancy of the water prevents too much exercise. The best exercise any of us can have is swimming, for the water holds the body up and all of the movements are supported. A suitable bathtub can be built so that the patient can be immersed under water and by systematic exercise in co-ordination of motion and by gradually increasing the exercise up to the time we think nature has done as much as she will in restoring the muscles we can accomplish a good deal. After that it is a question of tendon transplantation and stabilizing the joints in one way or another.

The treatment at the start after the paralysis has supervened the important thing is absolute immobilization of all muscles.

*Dr. Harold I. Reynolds*, Athens, Ga. (closing)—I only wish to say that I think the diagnosis of these cases in the preparalytic stage is exceedingly difficult. Unless we keep the disease constantly in mind we will probably miss a great many more cases than we diagnose. The doctor often does not see these patients

until paralysis has occurred. Some cases are very mild. A child may go to bed apparently all right and wake up the following morning with paralysis. We should try to diagnose cases as early as possible, for the earlier the convalescent serum is used the better is the prognosis.

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## BELLADONNA IN ABDOMINAL DIAGNOSIS AND TREATMENT\*

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At a hospital staff meeting, held recently, there was cited among the death reports the case of a young boy whose death was attributed to the rupture of a gangrenous appendix by forty grains of calomel. Since this had occurred under the observation and direction of a physician, the discussion was prolonged and indignant. Was it the fact, or the degree, of purgation, that caused those present to condemn the physician as "brutally ignorant"? Indicative of the latter was the statement of one earnest practitioner, who finally asked, with much feeling, "Can any one tell me what to do when I am requested to prescribe by telephone for a slight abdominal pain, or even see a patient, in whom appendicitis is only a remote possibility? We cannot put all of these people in the hospital for observation, nor remain at the bedside to see what might develop."

This problem, with slight variations, is presented to each of us constantly. Sometimes the result is wrongful delay, with an operation embarrassingly late. Sometimes there is the less embarrassing removal of a normal appendix. Many times there is much worry and loss of rest for the doctor, with equal worry and needless expense for the family.

A similar question is met in the chronic conditions. How may we differentiate the nagging pain of chronic appendicitis, or pericaecal adhesions, from the similar pain of colitis? How may we know when to cease treating a known duodenitis, gastritis, or ulcer, and advise surgery for the gallbladder,

adhesions, or other factors that have been blocking improvement?

The great majority of pains in the abdomen arise from spasm, distension, or inflammation. Visceral distention is frequently due to spasm farther on, and inflammation will usually cause spasm, if involuntary muscle is involved. Therefore, if one can know and trust the anti-spasmodic action of a drug, its use should be of real value in determining the presence of spasm, and when such is found, in estimating the power of the factor producing it. After ten years' almost constant use of belladonna and its alkaloid, atropine, in both diagnosis and treatment, I am convinced that its addition to the procedures now in vogue will greatly lessen the time usually spent in diagnosing the "doubtful" acute abdomen, while reducing to a minimum the mistakes made.

Illustrative of the various phases I wish to emphasize are a few cases reported below. The function of belladonna in the making of a diagnosis, varied from merely strengthening an opinion already formed, to actually changing the entire picture, and being the major factor in reaching the correct decision. Space does not permit the complete report in these cases and only the essential facts are given. It is realized that repeatedly constant results are necessary to establish a truth, and these cases are offered, not as individuals, but as typical examples of large groups. The very nature of the discussion makes any experimental or technical data unnecessary.

One has only to refer to current medical literature to note the rapidly increasing use of belladonna in therapeutics, and most x-ray men have long used it in the study of doubtful conditions around the pylorus. No claims of a new discovery are made in this article, the reason for reporting this work being that the facts demonstrated answer satisfactorily, to me, the question quoted in the first paragraph.

### Case Reports

Case 1.—Miss F. M. S., age 28. Seen at home, in bed. For two days she had suffered with gradually increasing pain in the lower mid-abdomen, wave like, and with acute tenderness in the same region. Two

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\*Submitted to the American College of Physicians.



doses of castor oil and several enemas had failed to produce even color. Vomiting of intestinal contents occurred every ten or fifteen minutes.

The patient had been examined a year before, with severe colitis diagnosed, and tuberculosis suspected. She was extremely thin and frail and a very poor surgical risk. The history of an appendectomy, in an acute attack, with temperature 103, two years before, completed the diagnosis of obstruction, but the only hope for the patient appeared to lie in proving the conclusion wrong.

She was given Tr. Belladonna, ten minims, to be repeated immediately if vomited, and in one hour if retained. It was decided to watch the case for three hours before taking further steps. When next seen, there had been no more vomiting, with definite lessening of the pain. Thus encouraged, three more hours were allowed, and a retention enema of mineral oil, six ounces, with bismuth, one ounce, was ordered. This produced two large stools in the next two hours, and all symptoms rapidly subsided.

It was only the response to the belladonna that kept me from sending this girl, poor and self-supporting, certainly to the hospital and heavy expense, probably to surgery she was little able to stand.

*Case 2.*—Mr. F. I. C., age 21. Seen at home, dressed, but lying on bed, with no evidence of suffering in his appearance. He complained of moderately severe colicky pain across the lower abdomen, of five hours' duration. There was no gastric or intestinal disturbance, and no history of such. He had had a few similar attacks in the past.

The physical examination was entirely negative, but inflammation of a deeply situated appendix was suspected, because the degree of pain, if intestinal, should have had associated some slight tenderness. He was given a hypodermic of atropine, instead of a sedative, and visited again in one hour. Very little relief was noticeable.

A second examination was made, and a tender spot found in the mid line, half way between the symphysis and umbilicus. This had been overlooked in the first examination and was elicited only by extreme pressure with one finger.

The patient was sent to the hospital, a blood count ordered, and a surgeon called. The latter refused to even consider acute appendicitis as the diagnosis, until the laboratory report came in, showed 18,000 leucocytes. A gangrenous appendix was found deep in the pelvis.

I feel that the refusal of the pain to respond to the anti-spasmodic must have influenced me in making the diagnosis since the

surgeon, a man of unusual experience and judgment, could find no diagnostic evidence, even two hours later.

*Case 3.*—Mr. C. E. C., age 45. Referred by a surgeon for treatment of a duodenal ulcer. The patient brought a complete report with x-ray films, showing normal gallbladder and duodenal ulcer. The only part of examination repeated was the fluoroscopic study of the stomach and duodenum, from which duodenitis was diagnosed, but ulcer not found. The treatment instituted was belladonna, bismuth, alkalis, and diet.

No relief was obtained in four weeks, and feeling confident that any duodenal pain would have subsided in much shorter time, he was sent back to the surgeon for exploratory laparotomy. Adhesions were found, extending from the field of a previous appendectomy to the right hypochondrium.

*Case 4.*—Mr. C. M., age 38. Chief complaint, daily pain in right hypochondrium and epigastrium. After a thorough physical, laboratory, and x-ray examination, duodenitis was diagnosed, and treatment started. There was some relief from the daily dyspepsia, but the patient continued to have pain. A re-examination was made, with no new findings. Exploratory laparotomy was advised, gallbladder pathology being suspected. A mass of peri-caecal adhesions and chronic appendicitis were found.

*Case 5.*—Mr. P. P., age 28. Diagnosis of duodenal ulcer was made from symptoms and typical x-ray findings. History of appendectomy for the same symptoms seven years before. The response to treatment was satisfactory and he was dismissed.

Six years later he returned and the same diagnosis was made. Less optimism was felt concerning another cure, but treatment was resumed. He suffered much pain and, though the belladonna was pushed to the point of toxicity, there was no lessening of it. Being apprehensive of a perforation, surgery was advised. A few fine adhesions were found around the duodenum, but the cause of the pain appeared to be tension on the omentum by adhesions between it and the scar of the previous operation.

Comment on Cases 3, 4, and 5: In each of these cases the failure of belladonna to lessen the pain was the deciding factor in advising surgery.

*Case 6.*—Mrs. F. H., age 55. Referred by a surgeon for confirmation of diagnosis. Cholecystogram already made showed chronic gallbladder pathology. Examination did not confirm or rule out the diagnosis, but did show a diverticulum, the size of a five-cent piece, on the second portion of the duode-



num. This being the sixth case of duodenal diverticulum found, and all having symptoms similar to those of chronic cholecystitis, it was suggested that we experiment with medical treatment, rather than be too sure about the gallbladder. Treatment, of which the major factor was belladonna, gave immediate relief, and there had been no return of pain when the patient was last seen, six months later.

I do not know why this case responded to the anti-spasmodic. The other cases of duodenal diverticulum did not.

*Case 7.*—Mrs. W. M., age 24. Seen in consultation, with the history that she had been under treatment for "infectious-toxic" psychosis during all of the preceding year. Salient points in the history were that she (1) would not eat, and tube feeding was necessary; (2) for six weeks had vomited everything fed through tube; (3) had obstinate constipation: six ounces of castor oil given every night with enema being necessary to cause stool in the morning; (4) voided urine only once daily, with stool, and usually in the bed; (5) would not wear clothes or respond to conversation; (6) the physician in charge was considering a gastrostomy to prevent starvation.

The extreme constipation had been attributed to mental control, but this opinion was not held logical, in view of the enormous doses of oil. A study of the stools showed them to be constantly formed in hard spherical balls, over an inch in diameter.

The castor oil was omitted, and 1/100 gr. of atropine given hypodermically three times daily. The vomiting ceased immediately and the bowels moved freely without cathartics. One week later the patient ate voluntarily for the first time in twelve months.

An x-ray of the colon, obtained later, showed a diameter of four inches and an emptying time, under catharsis, of six weeks. It was shown that enemas only filled the sigmoid, due to dilatation and torsion under pressure.

It was interesting to see a colon so markedly dilated and atonic show also this extreme degree of spasticity.

The patient died from pneumonia occurring two weeks after resection of the proximal half of the colon.

*Case 8.*—Mr. A. A. C., age 41. Chief complaint, attacks of fear, increasing in frequency for ten years—now may have several in one day. Constipation was the only other symptom. The attacks as described were very suggestive of the aura of epilepsy, and his first known convulsion was reported by his wife, shortly after his examination. The

only positive pathology found was a marked spasticity of the distal half of the colon, with very evident caecal stasis.

The emptying time of the colon without cathartics was not studied, but with a dose of salts every night producing three to five large watery stools a day—the caecum was found filled with barium after four days.

He was given Tr. Belladonna, 5 minims, with half a dram each of bismuth and magnesia three times daily. An ounce of mineral oil was taken each night.

Under this treatment the colon outline, by x-ray, became normal in a week, and the emptying of the caecum was more complete with one daily stool than on the heavy purgation above described.

There was an immediate and progressive improvement, which continued for two years, at which time contact with the patient was lost.

*Case 9.*—Mr. H. F., age 45. Came in for examination with report of a recent diagnosis of chronic cholecystitis, with a recommendation of surgery. His examination, physical, laboratory, and x-ray, failed to show any other cause for his pain. Because of tenderness over the gallbladder and typical symptoms the diagnosis of chronic cholecystitis was confirmed and effort was made to send him back to the other physician. He insisted on a try at medical treatment and, to satisfy him, such was prescribed.

His relief was immediate, and apparently permanent, a report five years later showing no further attacks of pain. It is my opinion that such a spectacular recovery on the belladonna therapy indicated an incorrect diagnosis.

*Case 10.*—Could be any one of dozens, where, by telephone or in person, atropine and enemas were ordered for undiagnosed abdominal pain with the feeling of certainty that an intestinal colic would be greatly relieved, while a possible acute appendicitis would be neither aggravated nor masked.

I have prescribed atropine or belladonna in eighteen proven cases of acute appendicitis without noticeable relief of symptoms in either case. In the intestinal colic group the relief of pain is usually immediate and of a degree satisfactory to the patient.

In cases of colitis, duodenitis, etc., a failure to appreciably lessen the pain with belladonna is almost invariably an indication of the presence of other pathology. In actual practice it is a valuable test in differentiating

those often associated pains, of duodenal ulcer and pathological gallbladder.

Regarding the therapeutic use of the drug, the benefit is more than palliative. One of the essentials in treating inflammation is rest of the organ involved, and in many cases the maximum of rest we can give is relaxation and reduction of self-traumatization. In the intestinal tract nature endeavors to protect the inflamed area by spasm, thereby removing all contents from it and prohibiting further passage of irritants through it. This is well illustrated by the early contraction of the duodenum in ulcer, and the well-known picture of colitis. If it is necessary that the function of the organ be continued, much less trauma is done to a relaxed than a spastic tube.

Belladonna is used by many as a routine in spastic constipation and mucous colitis. Pediatricians have found it of great value in pyloric stenosis, and have apparently appreciated its virtue more than have the internists. The author cannot see why it is not universally used in the treatment of peptic ulcer.

Results in the urology field are not so gratifying, and other drugs, as hyoscyamus, often appear more effective. Its effect on ureteral pain, as compared to intestinal colic, is slight. This fact also has diagnostic value when the question of cause lies between the colon and the ureter.

The optimum dose will vary slightly with the patient and is usually only a little less than the toxic dose. In my experience four minims is the largest dose that can be taken three times a day by the average person. Care must be taken that the measure is correct, there being usually two or more drops to the minim, when the tincture is used.

The patient should be advised to watch for the toxic symptoms of dryness in the mouth and dilatation of the pupils. Since there is a cumulative effect, these symptoms may occur only after weeks of treatment.

When used for immediate relief of pain, for diagnostic or therapeutic purposes, the drug should be pushed to the point of slight

toxicity. Otherwise the "belladonna test" is not conclusive.

I have yet to see any analgesic effect of practical degree from belladonna, except where such effect is by the relaxation of spasm, and to call it an analgesic is not in keeping with the usual meaning of the word.

There has been no evidence of either habit formation or increasing tolerance in my experience, and only one individual has shown a true idiosyncrasy. In this case one minim would produce a definite vaso-motor reaction. Practically all of those who "cannot take belladonna" acquire that belief by overdosage.

#### *Summary*

Belladonna is of extraordinary value in differentiating an intestinal colic from acute appendicitis, when there is only suggestive, but not diagnostic, evidence of the latter.

It will relieve or greatly reduce the pain of colitis, duodenitis, and peptic ulcer.

It will not relieve the pain of appendicitis, gallstone colic, renal calculus or obstruction.

Belladonna or atropine with an enema is the rational prescription for the unseen patient with pain and constipation.

In spastic colitis, spastic constipation, and peptic ulcer it should be used as routine treatment.

The usual optimum dose of the tincture is four minims, or eight to ten drops, of the alkaloid 1/50 to 1/100 gr.

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#### SUPPURATION IN PARANASAL SINUSES AS FACTOR IN FOCAL INFECTION

In a review of the histories of 400 cases made by Carl M. Anderson, Rochester, Minn. (*Jour. A.M.A.*, June 14, 1930), sinusitis was not a factor in focal infection. Teeth, tonsils, the prostate gland, and other foci are of more importance. Suppurative sinusitis may be a focus of infection on rare occasions. In a patient with a nose normal on clinical examination, and with a history negative for diseases that can be referred to the nose, any exploration which involves mutilation of the nasal membranes is not justified. Unnecessary trauma reduces the resistance of the membrane and may introduce infection. Toxins are absorbed by the blood stream, but bacteria are rarely transmitted to distant parts of the body from the paranasal sinuses. Existing infection of the nose and paranasal sinuses should be treated in the most conservative manner consistent with the complete eradication of the disease.

REVIEW OF SOCIOLOGICAL SECTION  
OF NATIONAL TUBERCULOSIS  
ASSOCIATION\*

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*Atlantic City—May, 1929*

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EVERT A. BANCKER, JR., M. D.  
*Atlanta*

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*Developments of Our Knowledge of Tuberculosis During the Last Quarter-Century and What Changes Are Required in the Tuberculosis Program*

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*Clinical Point of View*

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GERALD B. WEBB, M. D.

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There have been eight outstanding advances in the past twenty-five years in clinical work in tuberculosis. First, there has been the development of the x-ray for diagnosis of pulmonary and other forms of tuberculosis and the realization that stereoscopic plates should be made in order to detect early pulmonary tuberculosis. Second, we have the increased appreciation of the value of prolonged rest. Third, we see the growth of sanatoria, allowing the application of rest, fresh air, and skilled attendance, as well as the isolation of children from tuberculosis. Fourth, the fall of the so-called specifics such as tuberculin and climate, and their employment only in treating selected cases.

Fifth, the empirical application of ultra-violet radiation and other forms of actinotherapy in extra-pulmonary tuberculosis. Sixth, the improvements in differential diagnosis from such diseases as accessory sinus and bronchial conditions and hyperthyroidism. Seventh, the relative disappearance of scrofula and the decrease in bone and joint tuberculosis since the introduction of widespread pasteurization of milk. Eighth, the increased conservatism regarding surgery in extra-pulmonary tuberculosis.

Suggestions for our future program are as follows:

The education of physicians to suspect tu-

berculosis as a possibility in every patient and to perform more sputum and x-ray examinations. The annual stereoscopic x-ray examination of all members of known tuberculous families. The building of more sanatoria for all types of cases and more preventoria for children. The realization of physicians and patients that at least three years are required for the cure of tuberculosis with the aid of prolonged rest and that this is the only specific. It was found during the World War that many physicians were unable to do a proper physical examination of the chest, and were not familiar with auscultation, following cough, for the detection of latent rales. The World War also taught us the value of x-ray examination of the accessory sinuses in patients with persistent cough. The diagnosis of tuberculosis was incorrectly made in many soldiers who had sinus or bronchial conditions or residual deposits of pneumonic processes. In rare instances the x-ray may fail to indicate a lesion in the lung, although hemorrhage has occurred. Unfortunately, much x-ray work is of poor quality and then there is often poor interpretation of x-ray films. The x-ray has proven a valuable method of treating lymph node tuberculosis. The von Pirquet skin test is still of value in determining the time of infection in children. Calmette, in France, has treated more than 120,000 infants with *Bacillus Calmette-Guerin* in immunizing doses so that the mortality from tuberculosis in France has been reduced by more than three-quarters. Artificial pneumothorax, although limited in application and not free from danger or complications, has found a permanent place in therapeutics and should probably be employed earlier than it is at present. Phrenicotomy, phrenectomy, and thoracoplasty are used at times in selected cases and have some value.

Homer Folks, LL.D., chairman of the New York State Charities Aid Association, discussed the failure of cases of tuberculosis to be reported. He quotes figures from several states and from them concludes that over 50 per cent of the cases of tuberculosis in the United States are not reported until after death. We have learned at least six things

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\*Read before the staff of the Atlanta Tuberculosis Association, Atlanta, Ga., February 27, 1930.



in regard to the reporting of tuberculosis during the past twenty-five years. First, that a law requiring the reporting of cases of tuberculosis has failed because it was not self-executing and cannot be enforced. Second, that it has been mainly through the agency of clinics and sanatoria that early cases have been discovered. Third, that a vastly more intensive educational campaign should be carried on among the laity as to the symptoms of tuberculosis and the importance of seeking medical advice which is qualified to diagnose early cases. Fourth, that there is relatively little value in referring people to the average practicing physician in the hope of discovering early cases of tuberculosis. Fifth, that people are more liable to go to a chest clinic for examination than to a private physician for the following reasons: An unwillingness or inability to pay the fees of private practice, greater confidence in a reputed specialist in tuberculosis than in a general practitioner and greater confidence in a physician coming from a distance and from a large city than in a local doctor. Sixth, that the only way in which we can diagnose early cases of tuberculosis consistently in increasingly greater numbers is in a clinic conducted by physicians with special experience and with all laboratory and x-ray aids necessary for dependable diagnosis.

From the experience of the counties in New York the author believes that local communities in general desire local tuberculosis hospitals supported by themselves, with no paid board of managers, but with competent medical directors co-operating with efficient state and local health authorities.

#### *Important Factors in the Decline of Tuberculosis*

LOUIS I. DUBLIN, PHD., *New York City*

The year 1928 had the lowest death rate on record for tuberculosis. Thirty years ago the rate was two and a half times as high as it is now. Thus in a single year 140,000 persons will now survive who would have died from tuberculosis had the rates of 1900 prevailed. This rapid decline has resulted largely from the direct intervention of all agencies of government and of social service interested in the health and well-being of the people. Improved industrial and economic

conditions have also played an important part.

The four most important separate factors involved in the decline of tuberculosis I believe to be as follows: Improved standard of living, better sanitary control, improved facilities, and public health education. At the main working ages of life, the industrial classes have death rates from tuberculosis more than twice as high as have commercial and professional workers. The standard of living of the American people has greatly improved so that the wage-earner of today can buy 20 per cent more commodities than he could in 1900. Sanitation is the function of health departments. Ordinarily, 10 per cent of the activities of a well-organized health department are directed against tuberculosis. One of the first steps in the tuberculosis campaign is to discover the early cases and to provide care for them. There are today approximately 75,000 beds for the tuberculous in the United States, which represents a shortage of about 25,000 beds if all the requirements of the country are to be supplied. Public health education is responsible for the new hygienic regime which is the chief reliance against the spread of infection. The schools have played an important part and in the future the newspapers, the moving pictures, and the lecture platform will have to assume the function of educating the public in regard to the prevention of tuberculosis.

#### *Tuberculosis Among Relatively Neglected Groups*

EDGAR SYDENSTRICKER, *New York City*

There are seven groups which are relatively neglected. If we wish to make our campaign against the white plague complete we must turn to the eradication of the disease in these groups. First, we have the economically handicapped persons, such as the negroes, the Indians, and the new immigrants, who are not adequately reached by facilities for prevention and care. Second, the constitutionally weak, who are found in all ages and in all walks of life and for the discovery of whom adequate measures have not been devised. Third, we have the rural population, in which the death rate from tuberculosis has not changed in the past twenty-five years, although they constitute a relatively neglected group. In spite of the fact that the anti-tuberculosis activities are concentrated in the cities, the urban death rate from tuberculosis has been definitely accelerated in New York State since the World War. Fourth, we find that there is a death rate of nearly 30 per 100,000 for children

under five years of age in the United States. Fifth, come the adolescent boys and girls and young adults in whom the disease ought to be prevented or at least arrested. Sixth, the striking excess of the male tuberculosis death rate over the female in all ages 35 and over, points to the fact that there is a large group of men in the prime of life who are still relatively neglected. Seventh, middle and old age constitute a truly neglected group and one so far very poorly emphasized in anti-tuberculosis efforts. In the age period, 55-65, one out of every 1,000 persons dies of tuberculosis, and in the age period, 65-74, the rate is still higher.

Dr. Emil Bogen, of Cincinnati, in discussing Mr. Sydenstricker's paper, said that the tuberculosis death rate among negroes in Cincinnati was higher than anywhere else in the United States, which was probably due to ignorance of methods of prevention, overcrowding, and unsanitary conditions. C. J. Johnson has claimed that before the Civil War the negro tuberculosis death rate for the United States was less than the white. Green showed that the tuberculosis death rate in Atlanta among the negroes is less than the corresponding rate in certain other communities, as in Los Angeles.

*Epidemiological Basis for the Control of  
Tuberculosis Among Children*

WALTER L. RATHBUN, M. D.,  
Cassadega, N. Y.

Most tuberculous children are infected in the home. Examination of the families of children with the childhood type of tuberculosis frequently discloses a member of the family with chronic fibroid tuberculosis, who at times is a dangerous spreader of tubercle bacilli. The best method of detecting these home cases is to examine all school children. The availability and receptivity of the children and the opportunity to teach them methods of prevention of spread of the disease make this one of the most fruitful fields in the anti-tuberculosis fight.

*The Place of Hospitals and Sanatoria in the  
Tuberculosis Program of the Next  
Twenty Years*

DAVID R. LYMAN, M. D.,  
Wallingford, Conn.

It is dangerous to prophesy just what the role of the hospitals and sanatoria will be in the ultimate eradication of tuberculosis, but it is just to surmise that they will play a most important part. Years ago, when the function of a sanatorium was at best that of a first-class boarding house under medical supervision, and when the only outlook for

an advanced case was a few more years of comparative comfort, we fixed as a tentative goal for our hospitalization program the ratio of one bed for each annual death in the the standard of their service, the demand upon them increases. The sanatoria of the future should be situated nearer the centers of population. Every sanatorium should give its patients the benefit of lung surgery for those cases in which it is indicated. Dr. Shirley W. Wynne, of New York City, in a discussion of this paper, further suggests that these institutions could well be used as teaching centers for medical students, nurses, and even general practitioners.

*Public Health Nursing as a Factor in the  
Tuberculosis Program of the Future*

ALTA ELIZABETH DINES, New York City

Public health nursing has meant much in the past and it will mean more in the future. More nurses will be trained in the handling of the many problems one has to face in caring for the tuberculous patient. She must be a social worker, a nutritionalist, and a mental hygienist as well as a nurse. She must carry into every home into which she goes an effective lesson in the value of periodic health examinations, so that early diagnosis can be made.

The public health nurse may be employed by a group of individuals who make up an organized board of management or by a public agency, municipal, county, or state. Less than one-half of the counties in the United States have requested such service, so that we find great sections of the country—notably the South and the West—where there are no public health nurses.

We shall hope to see a more intensive program of health protection for all age groups, with perhaps much greater development of the ready-made groups—the elementary schools, the high schools, the colleges, and the great industrial groups.

MINUTES OF THE COUNCIL

FIRST MEETING  
Tuesday, May 13, 1930

The first meeting of the Council of the eighty-first annual session of the Medical Association of Georgia was called to order at 6:05 p.m., by the Chairman, Dr. M. M. Head, Zebulon.

*Roll Call*

Secretary Bunce called the roll and the following Councilors, Vice-Councilors, and Officers responded:

William H. Myers, Savannah, First District.

J. A. Redfearn, Albany, Second District.

R. F. Wheat (Vice-Councilor, Bainbridge, Second District.

Charles A. Greer (Vice-Councilor), Oglethorpe, Third District.

O. W. Roberts, Carrollton, Fourth District.

E. C. Thrash, Atlanta, Fifth District.

M. M. Head, Zebulon, Sixth District.

H. M. Fullilove, Athens, Eighth District.

C. L. Ayers, Toccoa, Ninth District.

S. J. Lewis, Augusta, Tenth District.

A. S. M. Coleman, Douglas, Eleventh District.

President Dancy, President-Elect Moore, Secretary Bunce, and Parliamentarian Clark.

### Reports of Councilors

#### FIRST DISTRICT

*Dr. William H. Myers, Savannah*

To the Council of the Medical Association of Georgia:

I wish to submit the following report as Councilor for the First District:

The condition of the District as a whole is satisfactory, but we have a few less members paid up than for last year. Many letters have been written to the county secretaries urging them to get behind the tardy ones, and it is believed that ultimately practically all eligible physicians in the District will be members. One exception is the Tri-County Society of Liberty, Long, and McIntosh, which is disorganized. Six letters have been written to the last known secretary, without having heard anything in reply. On several occasions I have offered to come up and help them to get together, but suppose that they have given up interest. It seems to be a case of indifference rather than anything else.

I have this year visited every organized society in the District, and note with pleasure the increased interest taken by the members in the programs of their counties.

The latest report on paid-up members compared with 1929 is as follows:

	May 1 1930	Members 1929
Bulloch, Candler, Evans—W. E. Simmons, Metter .....	18	22
Burke—W. W. Hillis, Sardis .....	14	15
Chatham—H. H. McGee, Savannah .....	71	79
Jenkins—C. Thompson, Millen .....	5	8
Screven—L. F. Lanier, Sylvania .....	10	8
Tattnall—J. M. Hughes, Glennville .....	5	9
Tri: Liberty, Long, McIntosh—H. H. Gibson, Allenhurst .....	—	3
Totals .....	123	144

There are two quacks in the District, one of whom is H. A. Boyde, of Savannah, who carries on his nefarious business by advertising in the daily papers. Another is an unlicensed practitioner, George B. Strange, of Springfield. I have tried to find some

way to prosecute him for illegally practicing, but I find officers of the law not inclined to do anything in the case, since he is a brother of a prominent judge of one of the circuits of the State.

(Signed) WILLIAM H. MYERS, M.D.,  
Councilor.

#### SECOND DISTRICT

*Dr. J. A. Redfearn, Albany.*

Mr. Chairman and Members of the Council:

It gives me pleasure to report the Second District in good condition. We had a meeting in October at Thomasville and one at Albany in April, both of which were well attended. All of the counties except Tift paid dues so that there are very few delinquents, the total paid membership being 108 for 1930, leaving only 27 delinquents in the entire district. The Tift County Society offers objection to the increased dues. Death has claimed two of our members: Dr. W. L. Davis, Albany, on November 11th. Dr. C. O. Tye, Edison, February 7th.

	May 1 1930	Members 1929
Colquit—T. H. Chesnutt, Moultrie .....	12	13
Decatur, Seminole—Jno. I. Spooner, Donalsonville .....	11	14
Dougherty—I. M. Lucas, Albany .....	17	18
Grady—J. V. Rogers, Cairo .....	9	11
Mitchell—C. A. Stevenson, Camilla .....	10	11
Thomas—A. D. Little, Thomasville .....	25	32
Tift—Carl S. Pittman, Tifton .....		11
Tri—Calhoun, Early and Miller—W. O. Shepard, Bluffton .....	14	21
Worth—Gordon S. Sumner, Sylvester .....	6	7
Totals .....	104	138
(Signed) J. A. REDFEARN, Councilor, Second District.		

#### THIRD DISTRICT

*Dr. B. T. Wise, Americus.*

(Presented by Dr. C. A. Greer)

Mr. Chairman and Members of the Council:

I am pleased to render the following report of the Third District:

Medical organization and medical activities of the Third District still hold a very high level. Although the paid-up membership in some of the County Societies has not reported as 100 per cent many of the societies have reported 100 per cent.

The secretaries of many of the societies report good attendance at their regular meetings, and an active interest in medical activities and good fellowship are always manifested.

During 1929 there were two sessions of the Third District Medical Society, both of which were well attended, and interesting papers presented, one at Ashburn in June, and the other at Dawson in November. At the Ashburn meeting our society was honored by having as its guests the President, Dr.



W. R. Dancy, the President-Elect; Dr. G. Y. Moore, the Secretary; Dr. Allen H. Bunce of the Medical Association of Georgia, and the Chairman of the Board of Councilors, Dr. M. M. Head. And we were fortunate in having as our guests other men who are prominent in the profession. The Dawson meeting was also well attended, and the society was again honored by the attendance of the President, and the President-Elect, as well as the other prominent physicians from many sections of our State. Instructive papers were presented at both meetings.

The Third District membership is as follows:

	May 1 1930	Mem- bers 1929
Ben Hill—L. S. Osborne, Fitzgerald.....	13	15
Crisp—T. J. McArthur, Cordele.....	15	19
Dooly—F. E. Williams, Vienna.....	6	9
Macon—H. C. Derrick, Oglethorpe.....	9	9
Randolph—G. Y. Moore, Cuthbert.....	28	30
Stewart-Webster—J. M. Kenyon, Rich- land .....	11	13
Sumter—H. M. Tolleson, Smithville.....	20	25
Taylor—R. C. Montgomery, Butler.....	4	5
Terrell—Logan Thomas, Dawson.....	11	12
Turner—J. H. Baxter, Ashburn.....	6	6
Totals .....	123	143
(Signed) .....	B. T. WISE, Councilor.	

#### FOURTH DISTRICT

*Dr. O. W. Roberts, Carrollton.*

To the Council of the Medical Association of Georgia:

Carroll County is well organized. Practically every eligible physician in the county pays his dues before the year ends.

Coweta County is also well organized. Dues from most of the men in Coweta County will be sent in, if they have not already been reported.

Meriwether County usually has eight or nine members, and they always get paid up—if not by May 1st.

Muscogee County had thirty-eight members last year. Not quite that number have paid up to date.

Talbot County is 100 per cent. One of their men belongs to a neighboring society on account of convenience in attending meetings. The other three meet every year, pay dues, elect officers, and keep their small number up to a perfect record.

Troup County probably will show an increase this year in membership. They already have as many members at present as they had the end of last year.

Heard County affiliates with Carroll. We secured one paid member from this county and have tried to get the only other eligible doctor there to join Troup County Society, as he lives nearer to LaGrange.

Chattahoochee County affiliates with Muscogee, as they have not enough physicians for an organization and are too remotely scattered.

We made a strong effort to organize Harris County. We found only five eligible physicians

widely scattered over a large county. One was in bad health and they thought they would not undertake an organization. One of them joined with Troup County and the best report we can make is that Harris County is affiliated with Troup.

From a standpoint of organization I think the Fourth District is in the best condition it has been in for the past twelve years. There are fewer physicians in the District, consequently few members—but the organization seems to be as good as can be.

We had one District meeting at Carrollton which was well attended and helpful. Dr. Bert McCord held one Obstetrical Clinic in our District which was also helpful.

Health Week was generally observed, clinics held, and school children examined. As far as I have been able to observe, the increase in dues has not kept many former members from paying up again this year.

The Fourth District membership is as follows:

	May 1 1930	Mem- bers 1929
Carroll—H. J. Goodwyn, Carrollton.....	13	19
Coweta—A. A. Barge, Newnan.....	3	12
Meriwether—R. B. Gilbert, Greenville.....		9
Muscogee—H. J. Bickerstaff, Columbus.....	25	38
Talbot—C. C. Carson, Talbotton.....	3	4
Troup—Hugh McCulloh, Jr., West Point .....	24	26
Totals .....	68	108
(Signed) .....	O. W. ROBERTS, Councilor.	

#### FIFTH DISTRICT

*Dr. E. C. Thrash, Atlanta.*

To the Council of the Medical Association of Georgia:

Campbell, DeKalb and Douglas Counties are in about the same condition as last year, with perhaps a few less members. Fulton County is not paid up to date, but I am sure the members will come through all right. We have only a few who do not pay, but all real genuine doctors get behind in their dues at times. I am sure that by December every one of our 427 members will be paid in full. The raise in dues last year did not affect our society for our annual dues are \$25.00 a year and we deduct the dues for the State Association from that amount.

The Fifth District membership is as follows:

	May 1 1930	Mem- bers 1929
Campbell—A. J. Green, Union City.....	4	4
DeKalb—J. R. Evans, Stone Mountain.....	9	12
Douglas—D. Houseworth, Douglasville.....		3
Fulton—Howard Haily, Atlanta.....	245	427
Totals.....	258	446

E. C. THRASH, Councilor,  
Fifth District.

SIXTH DISTRICT

*Dr. M. M. Head, Zebulon*

To the Council of the Medical Association of Georgia:

The Sixth District shows now 121 paid members in 1930; in 1929 we had 166 paid members. The Sixth District seems to be in good condition as far as I have been able to learn. I have not been over the District as I should. It seems some of the counties have had men to die and move out of the county, and others had men to move in. We have had in the past year two District meetings, one at Indian Springs in June and one in Griffin in November. Both had good attendance and programs.

The Sixth District membership is as follows:

	May 1 1930	Members 1929
Bibb—R. C. Coolsby, Jr., Macon.....	52	87
Butts—R. L. Hammond, Jackson.....	4	4
Clayton-Fayette—H. D. Kemper, Jones- boro.....	8	10
Henry—H. C. Ellis, McDonough.....	7	9
Jasper—E. M. Lancaster, Shady Dale....	2	7
Jones—J. D. Zachary, Gray.....	3	3
Lamar—J. M. Rogers, Barnesville.....	5	6
Monroe—J. O. Elrod, Forsyth.....	5	5
Spalding—H. J. Copeland, Griffin.....	24	25
Upson—R. L. Carter, Thomaston.....	11	10
Totals .....	121	166
(Signed) M. M. HEAD, Councilor, Sixth District.		

SEVENTH DISTRICT

*Dr. M. M. McCord, Rome.*

To the Council of the Medical Association of Georgia:

As Councilor of the Seventh District, I have the honor to herewith submit to you my report of the district up to May 1, 1930. The report by counties is attached to this supplement.

According to records, our district reported 150 members who paid their dues during 1929. However, some of these paid very late in the year. Up to May 1, of this year, we have had 127 members to pay their dues in this district, leaving a shortage of twenty-three over the full membership of last year. So far, I have gotten no response from Murray County. I fully believe the men in that county will pay up—possibly before the State meeting. I plan to make a trip to Murray County and meet with the members up there and get them to act promptly in this matter.

Several of the counties have not as yet reported their full membership for the year. There are always a certain number of members who will put off to the very last to do what they know they should do early. I am now working with the secretaries of the county societies of the district and fully expect in the very near future to report at least as many members paid as last year. So far, I have not heard

a single kick from any one as a result of the raise in dues.

One of the greatest handicaps to the progress of our district and the promptness of members in making payment of dues is the fact that county secretaries are indifferent and careless about doing their duty; in fact, I can write all of them and enclose postage for reply, and even where the reply only necessitates a few words, there will be no reply at all from at least half of them. I understand that this same condition prevails with other councilors. Our profession can never make the progress in the State that it should until each man realizes that he has a duty in this matter and does it.

You may depend on the Seventh District making a high score of members in the final check-up.

The Seventh District membership is as follows:

	May 1 1930	Members 1929
Bartow—H. C. Pearson, Cartersville.....	11	12
Chattooga—H. D. Brown, Summerville....	12	15
Cobb—L. L. Welch, Marietta.....	30	33
Floyd—E. J. Raddliffe, Rome.....	32	31
Gordon—W. R. Richards, Calhoun.....	6	12
Haralson—W. H. Malone, Tallapoosa....	1	1
Murray—E. H. Dickie, Chatsworth.....	—	6
Polk—P. O. Chaudron, Cedartown.....	10	10
Walker—J. H. Hammond, LaFayette.....	14	17
Whitfield—E. O. Shellhorse, Dalton.....	11	13
Totals.....	127	150
M. M. MCCORD, Councilor, Seventh District.		

EIGHTH DISTRICT

*Dr. H. M. Fullilove, Athens*

To the Council of the Medical Association of Georgia:

The Eighth District is in very good condition and I am sure that the counties will all be paid up within a short time.

The Eighth District membership is as follows:

	May 1 1930	Members 1929
Clarke—M. A. Hubert, Athens.....	20	27
Elbert—B. B. Mattox, Elberton.....	13	12
Franklin—B. T. Smith, Carnesville.....	7	11
Greene—J. R. McGibony, Greensboro....	5	5
Hart—W. E. McCurry, Hartwell.....	—	8
Madison—W. D. Gholston, Danielsville..	5	8
Morgan—W. C. McGeary, Madison.....	4	4
Newton—W. D. Travis, Covington.....	5	6
Walton—J. K. McClintic, Monroe.....	10	10
Wilkes—H. T. Harriss, Washington.....	8	10
Totals.....	77	101
H. M. FULLILOVE, Councilor Eighth District.		

## NINTH DISTRICT

*Dr. C. L. Ayers, Toccoa*

To the Chairman of the Council:

I herewith submit a brief report of medical conditions in the Ninth District.

At the end of 1929 we had 105 members in the State Association. On May 1st of this year we had ninety-five members; since May 1st, members have sent in their dues, which gives us a total to date of 100 against 105 for the whole of last year. By the last of the year I am sure we will equal last year or perhaps slightly more. There are very few eligible members in the Ninth District who do not belong to the Association.

Since our last State meeting there has been two District meetings, one at Winder, and the other at Commerce. These meetings were well attended, and both had good scientific programs.

The Ladies Auxiliary had a good attendance at both meetings and a splendid program.

About eight or nine counties in the district observed Health Week this month and I feel that these meetings will bring about a better understanding between the people and the profession as well as to save many lives.

The Ninth District membership is as follows:

	Mem- bers May 1 1930	1929
Banks—Mat P. Deadwyler, Maysville....	—	1
Barrow—W. L. Mathews, Winder.....	10	10
Blue Ridge—C. B. Crawford, Blue Ridge	4	5
Cherokee—George C. Brooke, Canton....	15	16
Forsyth—J. A. Otwell, Cumming.....	8	5
Gwinnett—D. C. Kelley, Lawrenceville..	8	8
Habersham—R. B. Lamb, Demorest.....	8	11
Hall—Pratt Cheek, Gainesville.....	19	22
Jackson—J. C. Bennett, Jefferson.....	11	15
Pickens—H. G. Atherton, Jasper.....	—	1
Rabun—J. A. Green, Clayton.....	3	2
Stephens—C. L. Ayers, Toccoa.....	9	9
Totals.....	95	105

C. L. AYERS,  
Councilor Ninth District.

## TENTH DISTRICT

*Dr. S. J. Lewis, Augusta*

To the Council of the Medical Association of Georgia:

There is little that I can add to the list supplied by the Secretary. Conditions throughout the district are very good.

The Tenth District membership is as follows:

	Mem- bers May 1 1930	1929
Baldwin—J. D. Wiley, Jr., Milledgeville	23	25
Jefferson—S. T. R. Revell, Louisville....	8	9

McDuffie—S. A. Boland, Thomson.....	—	1
Richmond—H. P. Harrell, Augusta.....	65	84
Taliaferro—T. C. Nash, Philomath.....	4	4
Warren—H. B. Cason, Warrenton.....	5	5
Washington—A. M. Cason, Sandersville	18	20
Totals.....	123	148

S. J. LEWIS,  
Councilor Tenth District.

## ELEVENTH DISTRICT

*Dr. A. S. M. Coleman, Douglas*

To the Council and the Medical Association of Georgia:

The Eleventh District membership on May 1st showed eighty-two members compared with 103 for 1929. Have been in hopes we could overcome this loss of membership by the time of this meeting, but have not heard whether there have been any additional paid members or not.

Brooks County was short two men this year; both of these think the dues are too high and would not come in. They have, however, taken in one new member which really makes them short only one man.

Coffee County is short four members. Two of our men who have always been very active, died last year, Dr. Whelchel and Dr. Ricketson. The other two have not paid dues and we have been unable to get the money from them.

Cook County shows a loss of one man. According to the Secretary's report, he thinks this man has affiliated with Lowndes County.

The Secretary of Lowndes County, which shows a loss of five men, wrote me on May 5th saying he had mailed a check for every eligible man in the county; therefore that county is 100 per cent.

Ware County is short two men. The secretary advises me that they are connected with the A. C. L. road, therefore in and out of Waycross from time to time, but on their next visit there he intends to collect dues from same.

This has been a hard year throughout this section. Some doctors, like some people, during hard times they hate to turn loose money.

The Eleventh District membership is as follows:

	Mem- bers May 1 1930	1929
Brooks—R. E. McClure, Quitman.....	6	7
Coffee—W. L. Hall, Nicholls.....	10	14
Cook—W. M. Shepard, Adel.....	5	6
Glynn—F. N. Aldrich, Brunswick.....	4	13
Lowndes—B. G. Owens, Valdosta.....	20	25
Ware—W. L. Pomeroy, Waycross.....	29	31
Wayne—A. J. Gordon, Jesup.....	8	7
Totals.....	82	103

A. S. M. COLEMAN,  
Councilor Eleventh District.



TWELFTH DISTRICT

*Dr. J. Cox Wall, Eastman.*

(Read by Secretary Bunce)

To the Council of the Medical Association of Georgia:

It is with a great deal of pleasure that I can report that the Twelfth District has been very active the past year.

We had a reorganization of the Wilcox County Society; they are very active, have a meeting once a month and it is always well attended.

I attended a called meeting of the Council in March of this year.

During the meeting of the Legislature last year I had the representative of the district send seventy-five telegrams urging them to support the Basic Science bill. This was done with no expense to the Association.

My district membership report does not quite come up to last year, but think by the time all secretaries report it will be fully as good.

The Twelfth District membership is as follows:

	May 1 1930	Members 1929
Emanuel—R. C. Franklin, Swainsboro...	9	14
Houston—Peach—J. H. Riley, Perry.....	—	3
Johnson—H. B. Bray, Wrightsville.....	—	4
Laurens—O. H. Cheek, Dublin.....	12	19
Montgomery—J. E. Hunt, Mount Vernon .....	5	5
Ocmulgee—A. R. Bush, Hawkinsville... 12	14	
Telfair—C. J. Maloy, Helena.....	10	13
Toombs—W. W. Odom, Lyons.....	—	9
Treutlen—L. I. Lanier, Soperton.....	—	1
Twiggs—A. J. Wood, Fitzpatrick.....	—	1
Wilcox—E. C. Harris, Rochelle.....	5	—
Totals.....	53	83

J. COX WALL,  
Councilor Twelfth District.

SECRETARY BUNCE: Between the time these reports were mailed to the Councilors and the time I left Atlanta, on May 12th, dues had been received from 110 more men throughout the State.

On motion regularly seconded and carried the reports of the Councilors were accepted as read.

NEW BUSINESS

*Expenses of Visiting Guests*

THE SECRETARY: According to our Constitution and By-Laws the Committee on Scientific Work may invite two guests for each annual session. This has been done this year. We have three guests, but the third was invited by the Abner Wellborn Calhoun Lectureship Fund. Formerly the expenses of our invited guests have been paid by our Association.

DOCTOR THRASH: I move that the Council recommend that the expenses of our invited guests be paid by the Secretary-Treasurer.

Motion seconded by Dr. Fullilove and unanimously carried.

*Appropriations*

Doctor Thrash moved that the Council should not recommend the appropriations of \$250 to the Cancer Commission.

Motion seconded and unanimously carried.

THE SECRETARY: The Council has been appropriating for the Committee on Public Policy and Legislation the sum of \$500 a year, or whatever part of this amount they need. In this way the Cancer Commission and the Committee on Public Health are both benefited by this fund.

I move that the usual appropriation be recommended for this committee.

Motion seconded by Doctor Dancy and unanimously carried.

THE SECRETARY: The next thing to be considered is the appropriation for the Committee on Medical Defense. The usual amount is \$3,500, or such portions as they may need.

Doctor Thrash moved that the same amount be recommended for the Committee on Medical Defense.

Motion seconded by Doctor Moore and unanimously carried.

THE SECRETARY: The next thing to be considered is a resolution which was introduced in the House of Delegates by Dr. Marion T. Benson this afternoon in regard to defraying the expenses of our Fraternal Delegates to other societies.

DOCTOR THRASH: I believe we should either discontinue sending Fraternal Delegates or pay their railroad fare and hotel bills. I do not think there is any great value in this custom.

THE SECRETARY: As a rule, men have been selected to attend other State meetings who would be glad to go, and it does not cost them much. There are so many more urgent things needed by our State Association that it does not seem to me wise to pay the expenses of these delegates, although I consider it well worth while to continue the custom of sending Fraternal Delegates. By selecting men who live relatively near the meeting place of our neighboring State Societies, little expense is incurred.

DOCTOR MYERS: I wish to support the remarks of Doctor Bunce, and I move that the present plan be continued and that the expenses of these delegates be not paid by our Association.

Motion seconded by several and unanimously carried.

THE SECRETARY: Before we adjourn an Auditing Committee should be appointed from the Council to audit the books of the Secretary-Treasurer.

Chairman Head appointed an Auditing Committee consisting of Dr. William H. Myers, Dr. J. A. Redfearn, and Dr. C. L. Ayers, and requested them to report at the next meeting of the Council.

Secretary Bunce brought up the recommendations in his annual report regarding the books of the Secretary-Treasurer, and stated that he had made these recommendations for the protection of the Council and himself.

PRESIDENT DANCY: I have talked with Doctor Bunce relative to these recommendations and know his feelings in the matter. The Association is trying to economize and the books are kept in a perfectly satisfactory manner. I see no necessity for making any changes in regard to the books. I believe, however, that it is only plain common sense to have all those who handle funds placed under bonds.

I move you, therefore, that the Executive Secretary be placed under bond for whatever amount the Secretary thinks necessary.

Motion seconded and unanimously carried.

President Dancy requested that Doctor Myers be given the privilege of the floor to report on the case of one of the men in the First District.

This request was granted and Doctor Myers reported briefly on the activities of Doctor Grenoble, who had recently been arrested.

Secretary Bunce, as a matter of information, stated that this man had also been tried and convicted in Fulton County, and that a certified copy of the records in that case had been sent the authorities at Statesboro.

#### *Adjournment*

Upon motion regularly seconded and carried, the Council adjourned at 7:10 p. m. to reconvene at the call of the Chairman.

#### SECOND MEETING

*Wednesday, May 14, 1930*

The Council met and was called to order at 6:00 p. m. by the Chairman, Dr. M. M. Head, Zebulon.

#### *Report Auditing Committee*

Dr. William H. Myers, Chairman, presented the following report:

Augusta, Ga., May 14, 1930.

We, the Committee appointed by the Chairman of the Council to audit the books of the Secretary-Treasurer, find that all the receipts and disbursements have been itemized and the accounts are correct.

(Signed) WILLIAM H. MYERS, Chairman.

C. L. AYERS,

J. A. REDFEARN.

As there was nothing further to be considered at this time, on motion regularly seconded and carried the Council adjourned at 6:45 p. m., to meet at the call of the Chairman.

#### THIRD MEETING

*Friday, May 16, 1930*

The Council reconvened and was called to order at 2:30 p. m. by the Chairman, Dr. M. M. Head, Zebulon.

On motion, regularly seconded and carried, Dr. M. M. Head was re-elected Chairman, and Dr. C. L. Ayers was re-elected Clerk.

There being nothing further to come before the Council at this time the meeting was declared adjourned at 2:40 p. m., *sine die*.

ALLEN H. BUNCE,

Secretary-Treasurer.

## THE DIAGNOSIS AND MANAGEMENT OF BREECH PRESENTATIONS\*

ROBERT B. CRICHTON, M.D.

*Atlanta*

The word breech usually strikes terror to many men in the practice of obstetrics. The main reason, I believe, is that the average man, when he finds this condition confronting him, becomes excited and tries to rush things too much. I believe this is because all the textbooks tell us we have so many minutes after such a thing happens, and a few minutes after a part presents to deliver a living child. Naturally we try to do all of these things according to the textbooks and find ourselves in a mess.

We all know the meaning of the word breech, the frequency, etiology, etc., so I will not take up your time going into the details of something we already know. I will mention, though, that we have two varieties of breech, namely, a simple or frank breech and a compound or mixed breech. The simple breech occurs in about 60 per cent of cases. The most common breech presentation is the L. S. A.

In taking up the diagnosis of breech it is comparatively easy. You first notice the contour of the abdomen, and find that the ovoid is longitudinal, the upper portion of the uterus is broader than the lower and runs to the side on which the head lies, producing a three-cornered effect. Upon palpating the abdomen it is easy to outline the back; also the head, which is found high in the fundus. When palpating the lower abdomen you find that the examining fingers will meet with a soft mass at the inlet of the pelvis instead of the firm head as in a vertex presentation. Another thing you will find here is that the fingers touch through the abdominal wall when the breech is not fully engaged. The location of the fetal heart sounds is an important point in making a diagnosis of breech presentation, for in this case they will be heard at the umbilicus or a little above either to the right or left.

As to making vaginal or rectal examina-

\*Read before Chattahoochee Valley Medical and Surgical Association, Albany, Ga., July 8, 1930.

tions I really do not see the necessity of either to determine whether or not there is a breech presentation. For if the membranes have not ruptured, I do not think you could tell much about whether the presentation is a breech or not, unless of course you find a foot at the os, which can be felt through the bag of water. My advice in regard to vaginal examinations is *don't make them*, for I feel sure you can make your diagnosis by means of a thorough abdominal examination.

In the management of these cases it is the practice of some men to attempt doing an external rotation, but from my experience this is no easy task, and even in a multipara I have seen very few which stayed in a cephalic presentation and delivered as such, unless delivered with a high forceps, of which I do not approve.

The first thing after making your diagnosis is to have the patient prepared as for any other delivery, and if the membranes have not ruptured give an enema. During the first stage we should try to preserve the bag of water as long as possible, for we all know that the breech is a poor dilator. In order to do this we encourage the patient not to bear down to her pains. After the membranes have ruptured I think it is a good plan to make a vaginal examination, although some of my listeners will not agree with me. I do this to determine whether or not there is a prolapse of the cord. It is a good idea to allow the patient to stay in bed, provided the delivery is to be in the home, until the breech is presenting at the vulva, at which time she is placed upon a table and preparations made for delivery. From this stage on she is encouraged to bear down to her pains. The doctor should let things alone until the delivery has progressed to the point where the umbilicus can be felt; of course he should keep up with the fetal heart rate, and also watch the cord for undue pressure. If there is no change in the heart rate, however, just let things alone. When the umbilicus is felt it is then time for him to assist in the delivery, and this is done by grasping the baby in both hands and applying light traction downward and outward. This must be done slowly to prevent extension of the baby's arms over its head. The traction is

continued until the angle of the scapula is reached. All this time the back of the baby is kept turned upward. The next step is to rotate the child to the left, and the right arm is delivered by hooking the index finger in the bend of the baby's elbow, and traction applied downward and to the left. The baby is then rotated to the right, and the left arm is delivered in the same manner, the traction being applied downward and to the right. After the arms are delivered the baby is then grasped by the shoulders and traction is applied downward to thoroughly engage the head. The baby is then placed on your right arm, with your two fingers in its mouth, the feet being grasped with your left hand. An assistant is then instructed to make gentle pressure just above the symphysis pubic and the head is delivered by applying traction with the right hand and turning the baby back over the mother's abdomen. Some men advocate applying forceps to the aftercoming head, but in my experience I have never found it necessary. I also think that by using the above method you stand a much better chance of protecting the perineum than by applying forceps.

The third stage of labor in breech presentations is like that in cephalic presentations except that there is more chance of postpartum hemorrhage.

#### CONCLUSION

1. Prolong the first stage of labor.
2. Preserve the bag of water as long as possible.
3. Don't make vaginal examinations; they won't tell you much.
4. Don't get excited.
5. Don't try to work too fast.

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The American Public Health Association will hold its forty-fourth session in Fort Worth, Texas, October 27-30, 1930, on epidemic control, disease prevention, child hygiene, public health engineering and industrial hygiene; including symptoms on meningitis, atmospheric pollution, undulant fever, metals in foods and typhoid. Manufacturers' exhibits of products and equipment used by health departments will be an important feature of the convention. Other features will be inspection trips to local water and sewage plants and hospitals, special trips to other Texas cities, and a nine day all expense tour to Mexico City upon invitation of Mexican public health authorities.



**THE JOURNAL**

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

SEPTEMBER, 1930

**MALARIA CONTROL**

The control of malaria in Georgia is of tremendous economic importance. The prevalence of this disease in certain sections of the State has undoubtedly been a factor in preventing the normal increase in population as well as in preventing the development of valuable natural resources.

In the control of malaria, as in other infectious diseases, we must consider three sides of an epidemiological triangle, as pointed out by Whitmore. These are: (1) the source of infection; (2) the mode of transmission, and (3) the susceptibility of the population. Breaking any one of these three sides of the triangle prevents the spread of the disease.

Man is the only source of infection in malaria and here the responsibility for the proper treatment rests with the physician. Every case of malaria should receive quinine early enough, in adequate dosage, and long enough to completely eradicate the disease in the individual. Some such course of treatment as that outlined by the State Board of Health should be used and the patient educated away from "chill tonics" and patent medicines. Plasmochin should be given to free the blood of gametes and thus prevent the infection of mosquitoes, which may bite the patient even after clinical symptoms have subsided. This drug must be given under close supervision of the physician to avoid overdosage and toxic effects.

The second side of the triangle or the control of transmission involves the eradication of the mosquito. (In the malaria belt of Georgia it is the *Anopheles quadrimaculatus* which is chiefly responsible for the spread of the disease.) Experience has shown what the concerted action of a group of doctors and sanitary engineers, with financial

backing can do in this respect. We may point with pride to the success of the Federal Government in Panama and the United Fruit Company in their holdings in malarial districts. However, in Georgia there is not only no program for co-ordinated effort by local Boards of Health, but no State appropriation for this work at all. The proper drainage and oiling or dusting of breeding places is an expensive and laborious procedure which, to be effective, must be general throughout the infested districts. We should have a State appropriation matched by Federal aid funds which would enable the State Board of Health to organize and co-operate with county and district Boards of Health to carry on this work.

In addition there should be extensive educational work among the people, teaching them the reasons for the work and its importance, the necessity of prolonged treatment of each individual case, the need of

*The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.*

the eradication of the mosquito, the screening of houses and sanitary measures in general.

With regard to the susceptibility of the population to the disease, we know of no specific measures at present except periodic quinine prophylaxis and improvement of the general health and economic status of the people. Relapses are most frequently seen in conditions such as exposure, fatigue, and malnutrition, which debilitate an individual in whom the disease has been quiescent.

The morbidity from malaria is on the increase in this state. We must recognize the situation and endeavor to aid in both professional and civil capacity any agencies which may bring relief.

J. C. MASSEE, M.D.

## RELATIONS OF PHYSICIANS TO HOSPITALS

The following resolution was adopted by the Fulton County Medical Society at a call meeting on August 14, 1930, as a substitute for that below beginning with "whereas".

(a) The physician and his fellow citizen are equally obligated to provide for the care of the indigent sick.

(b) In mutual charitable undertakings for the care of the sick, each citizen contributes what he has; the laymen, physical necessities; the physician, professional skill. But each has a right to protect himself from exploitation, and to judge of the merit of the recipients of his bounty.

(c) When a hospital offers its facilities to a mixed clientele, pay, part pay and pauper, the distinction between the sources of those facilities should be clearly recognized. The physical equipment and service is of general public origin, and their uses may be sold or given away in the discretion of lay boards; but the professional facilities are, and always must be, the contribution of the medical staff as individuals and cannot become in any sense the property of the institution.

(d) When a hospital is owned and operated by government, and supported by taxation, to which the medical profession contributes its due proportion, medical attendance should be paid for by taxation, along with all the other facilities supplied by the institution.

(e) No hospital instituted and supported by public philanthropy or community co-operation of any kind should be permitted to increase its revenues, and so reduce its financial burden on the public, by any system of collecting fees for medical attendance, and thus engaging in the corporate practice of medicine.

(f) The membership of the Association should be guided by these principles in accepting posts on the staff of hospitals and should refuse to support by the contribution of their services, or by the references of their patients, any institution violating them.—  
Extract of Proceedings of the Detroit Session A. M. A.

Whereas, it is common knowledge to members of Fulton County Medical Society that:

1. Patients are entering Grady Hospital and other charitable institutions, receiving medical attention without cost, who are able to pay a medical fee.

2. Patients who are financially able are being treated and fees collected, in Steiner Ward, in many cases not commensurate with the work done, such fees being paid into a so-called staff fund for upkeep and changes in the hospital, thus entering into the corporate practice of medicine.

3. Inasmuch as this institution is supported by the city by general taxation and is not regulated by medical ethics, as is the private physician, this would seem unfair competition.

### THEREFORE BE IT RESOLVED:

1. That Fulton County Medical Society recommend to the proper authorities that this institution be placed on a strictly charity basis.

2. That all patients applying for treatment at the White Unit and Steiner Ward at Grady Hospital be received through a common admittance and investigating office.

3. That all patients receive an adequate investigation as to their financial ability to pay and that those patients accepted shall be required to sign an affidavit that they are unable to pay for medical or institutional treatment.

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## GEORGIA STATE NURSES' ASSOCIATION

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## TWENTY-FOURTH ANNUAL CONVENTION OF THE GEORGIA STATE NURSES ASSOCIATION

The twenty-fourth milestone of progress will be marked by the Georgia State Nurses Association when the organization convenes in Atlanta, October 27-29. Several hundred members should be in attendance, in addition to officers, councilors, and visitors.

Miss Lucia Massee, President, will preside, and the Ansley Hotel will be headquarters.

Miss Nina D. Gage, Executive Secretary of the National League of Nursing Education, with headquarters in New York, will be one of the principal speakers. Miss Gage will discuss the nursing situation as it exists throughout the country today, and will represent the National Headquarters of all three nursing organizations—the National League of Nursing Education, the American Nurses Association, and the National Organization for Public Health Nursing.

Miss Gage is a former president of the International Council of Nurses and a striking figure in the nursing profession. She has been identified with nursing education for many years, and was dean of the school of nursing connected with the Yale University Hospital, Hounan, China.

*Georgia League of Nursing Education*

Miss Laura Logan, dean of the Cook County Hospital School of Nursing, Chicago, and Miss Shirley C. Titus, dean of the School of Nursing of Vanderbilt University, Nashville, Tenn., are other nurse leaders expected to be present and to participate in the programs of the three organizations which annually meet jointly in convention—the Georgia State Nurses Association, the Georgia League of Nursing Education, and the State Organization for Public Health Nursing.

The discussions of the League session will relate principally to problems in education.

Those of the G. S. N. A. will center around service.

Miss Logan, a former president of the National League of Nursing Education, will speak on the educational position of the nurse of today.

Miss Titus, who is Vice-President of the National League of Nursing Education, will present the advantages of university preparation.

A feature of the League program will be a survey of the present situation in our own State, by Jane Van De Vrede, Secretary of the Board of Examiners of Nurses.

Dr. C. S. Lentz, Chairman of the Hospital Committee of the Medical Association of Georgia, has been invited to take part in this discussion also.

Dr. Bert Caldwell, Executive Secretary of the American Hospital Association, has been invited to be present, and it is hoped that other members of the Hospital Association, which convenes in New Orleans just previous to the convention, will attend also, as they return from the meeting in New Orleans and pass through Atlanta.

Mrs. Eva S. Tupman will preside over this meeting.

Among the Georgia nurses who will contribute to the program, in addition to Miss Lucia Massee, President of the Georgia State Nurses Association, and Mrs. Eva S. Tupman, President of the Georgia League of Nursing Education, who is instructor at Grady Hospital, Atlanta, are Miss Emma Habenicht, President of the State Organization for Public Health Nursing, and who is the local superintendent of nursing service for the Metropolitan Life Insurance Company; Miss Dora Kershner, President of the Sixth District of the G. S. N. A. and superintendent of nurses of the Oglethorpe Private Infirmary, Macon; Miss Eva Chalkley, Presi-



dent of the Fourth District Association, Columbus; Miss L. Carey Jones, district supervisor of nursing service for the Metropolitan Life Insurance Company; Miss Lynda Bray, Chairman of the Committee on Ethics and superintendent of nurses of the Athens General Hospital, and others.

*Private Duty Section of the G. S. N. A.*

Dr. G. Y. Moore, President of the Medical Association of Georgia, will feature the program of the Private Duty Section, discussing methods for effective medical and nursing service, especially as related to the rural sections.

Miss Eva Chalkley, Chairman, will preside over this Section meeting, and a number of nurses prominent in the State will take part in the program.

Mrs. Sue Paille, for many years a successful private duty nurse of Atlanta, will present a paper on "Making the Most of One's Self in Private Duty".

Miss Isabel Battle, of Columbus, will discuss the relationship of the private duty nurse to the hospital. Miss L. Saxon and Miss Frances Blakely, of Rome, will be among those contributing to this program.

Dr. R. C. Swint, superintendent of the Georgia State Sanitarium, Milledgeville, will give a paper on "The Mental Disease Problem of Georgia."

*Session for Office Nurses and Anaesthetists*

One particularly interesting feature of the annual meeting should be the session to be devoted to an open forum for office nurses, anaesthetists and technicians, who will meet in a group under the auspices of the State Association for the first time, this year.

Miss Sarah Dicey, of Atlanta, will present a paper on "Educational Opportunities of the Office Nurse".

*Organized Nursing Service*

Another interesting session will be held for discussion of problems connected with the organization of nursing service in homes. This subject was given a great deal of consideration at the recent Biennial of the American Nurses Association, and it is particularly timely, since there is unemployment among graduate nurses and a great need for extension of graduate nursing service into homes as well as hospitals. This subject will be discussed by such well-known nurses as Miss Jean Harrell, Chairman of the Registry Committee of the Fifth District of the G. S. N. A.; Miss Dora Kershner, President of the Sixth District and representing its official registry; Miss Eva Chalkley, President of the Fourth District; Mrs. Kate Sullivan, of the First District registry, and others.

Mrs. S. B. Whittier, of Chattahoochee,

Ga., will also contribute a paper to this session.

One afternoon during the three-day convention will be given over to visiting local hospitals and to demonstrations of various types of nursing technique.

*The American Red Cross*

There will be a Red Cross session, when Miss Hattie Wilker, of Macon, delegate to the National Convention of the American Red Cross, will read her report, and State and local committees will also give their annual reports.

A National representative of the service will participate in this session.

*S. O. P. H. N.*

The State Organization for Public Health Nursing will hold its regular annual session Wednesday, October 29th, with Miss Emma Habenicht, President, presiding.

Before the opening of this meeting a breakfast will be tendered public health nurses, from 7:30 to 8:30.

Transaction of business will consume the first session, after which demonstration of pre-school visiting will be given by the members of the Savannah Health Center.

A round-table discussion on School Nursing will follow, led by Miss Lillian Alexander, director of nursing service for the city of Atlanta, and Miss Ruth Mettinger, nursing field representative of the A. R. C., will hold another round table from 11:00 to 11:50.

Miss Helen Bond, director of the Savannah Health Center, will preside over a luncheon for public health nurses, and Miss Nina D. Gage will be the honor guest and speaker of the occasion. Miss Evelyn Dugger, of Atlanta, will have charge of the luncheon arrangements.

*Maternity Institute*

Immediately following the convention there will be a two-day institute under the auspices of the New York Maternity Center Association, co-operating with the Fifth District Association. Enrollment is limited to sixty. There will be two-hour sessions, morning and afternoon. The fee for this institute is \$3.00. Nurses desiring to attend should communicate with Miss Lillian Cumbee, care Wesley Memorial Hospital, Emory University, Ga.

*The Convention's Social Side*

On Sunday, October 26th, a reception in honor of the visiting nurses, doctors, hospital administrators and others passing through Atlanta on their return from the convention of the American Hospital Asso-

ciation, will be held on the Ansley Hotel Roof Garden. Local doctors and hospital people will also be guests.

The annual banquet will take place Tuesday evening, October 28th, on the Hotel Ansley Roof Garden.

An automobile ride to Stone Mountain will be one of the special features, and daily luncheons are also being planned.

Members of the Fifth District Association, of which Miss Lillian Alexander is President, will be official hostesses, and Miss Nancy Dell Jenkins, superintendent of nurses of the Georgia Baptist Hospital, Atlanta, is chairman of local arrangements. Other members of the Arrangements Committee are Miss Jessie M. Candlish, superintendent of the Eggleston Memorial Hospital for Children; Miss Lucy I. Mace, superintendent of nurses of St. Joseph's Infirmary; Miss Minnie Bass, superintendent of nurses of the Wesley Memorial Hospital, Emory University, Ga.; Miss Lillian Cumbee, instructor, Wesley Memorial Hospital; Miss Genevieve Garren, superintendent of the Piedmont Hospital; Miss Katherine Woodburn, Miss Dorothy Fowler, Miss Marie Shivers, and Miss Mary Bethel.

#### DEATHS

Died August 2, 1930, at Savannah, Ga., after almost thirty-three years of active practice, Miss Eva Cunningham. Miss Cunningham was a native of South Carolina. She received her training at the Memorial Hospital, St. Marks Ave., Brooklyn, N. Y., class of June, 1897. She was a charter member of the Georgia State Nurses' Association. For many years a successful private duty nurse and for the past ten years in public health nursing. She endeared herself to many associates. She will be missed in and out of the profession. Her fortitude in suffering evidenced the same stalwart qualities she exhibited through her long useful life.

Died June, 1930, at Savannah, Ga., after several months illness, Miss Ella M. Johnstone. Miss Johnstone was graduated from Christ Hospital, Jersey City, N. J., class of 1898. She was a charter member of the Georgia State Nurses' Association and the first President of the Board of Examiners of Nurses for Georgia. As private duty nurse, as nurse at the Fresh Air Home during many summer sessions at Tybee Island, or as resident nurse for the Western Union Telegraph Company Miss Johnstone's services were kindly and thorough. Her many friends among nurses and patients alike will miss her counsel and presence. During her retirement she kept abreast of advances in nursing and welcomed them keenly.

#### COMMUNICATIONS

##### To the Editor:

In addition to the articles enumerated in our letter of July 26, the following have been accepted:

- International Vitamin Corporation,
- I. V. C. Vitamin Concentrate of Cod Liver Oil.
- National Drug Co.,
- Antimeningococcic Serum.
- Parke, Davis & Co.,
- Gas-Gangrene Antitoxin (Combined) Refined and Concentrated.
- Soluble Gelatin Capsules. Parke, Davis & Company's Standardized Cod Liver Oil, 10 minims.
- Soluble Gelatin Capsules. Parke, Davis & Company's Standardized Cod Liver Oil, 20 minims.
- Soluble Gelatin Capsules. Parke, Davis & Company's Standardized Cod Liver Oil, 2.5 Gm.
- Soluble Gelatin Capsules. Parke, Davis & Company's Standardized Cod Liver Oil, 5 Gm.
- G. B. Searle & Co.,
- Chiniofon-Searle.
- Tablets Chiniofon-Searle, 0.25 Gm. (4 gr.)
- C. M. Sorensen Co., Inc.,
- Inhalant Chloretone Creosote and Eucalyptol-Sorensen.
- Spicer & Co.,
- Tartro-Quiniobine.
- Tartro-Quiniobine Ampules, 2 cc.
- White Laboratories, Inc.
- White's Cod Liver Oil Concentrate.
- Nonproprietary Articles.
- Quinine Bismuth Iodide.
- Sodium Potassium Bismuthyl Tartrate.
- The following article has been exempted and included with the list of Exempted Medicinal Articles (New and Non-official Remedies, 1930, p. 477):
- C. M. Sorensen Co., Inc.,
- Inhalant Pine Camphor and Eucalyptol-Sorensen.

#### COUNCIL ON PHARMACY AND CHEMISTRY, A. M. A.

Chicago, Aug. 29, 1930.

#### TRUTH ABOUT MEDICINES

##### New and Nonofficial Remedies

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Non-official Remedies:

Ampules Emulsion Mesurol, 20 per cent, 1 cc.—A suspension of mesurol (New and Nonofficial Remedies, 1930, p. 100) in sesame oil, each cubic centimeter of which contains mesurol equivalent to from 0.103 to 0.117 Gm. of bismuth. Winthrop Chemical Co., Inc., New York.

Tablets Theocin 1½ grains.—Each tablet contains theocin (New and Nonofficial Remedies, 1930, p. 415) 1½ grains. Winthrop Chemical Co., Inc., New York.

Ampules Mercurochrome—H. W. & D., 1 per cent, 10 cc.—An aqueous 1 per cent solution of mercurochrome—220 soluble (New and Nonofficial Remedies,



1930, p. 271) stabilized with ammonia hydroxide; in 10 cc. ampules.

Ampules Mercurochrome—H. W. & D., 1 per cent. 20 cc.—An aqueous 1 per cent solution of mercurochrome—220 soluble (New and Nonofficial Remedies, 1930, p. 271) stabilized with ammonium hydroxide; in 20 cc. G. D. Searle & Co., Inc., Chicago. (Jour. A. M. A., August 2, 1930, p. 343.)

Diphtheria Toxoid-Cutter.—Diphtheria Toxoid-Cutter (New and Nonofficial Remedies, 1930, p. 485) is also marketer in packages of one 45 cc. vial. Cutter Laboratory, Berkley, Calif.

Synthetic Thyroxine.—It contains no less than 65 per cent of iodine. It has the actions and uses of thyroxin, U. S. P. (New and Nonofficial Remedies, 1930, p. 403.) Synthetic thyroxine is supplied in the form of ampules containing 1.1 cc. of solution containing 1 mg., and in the form of a solution, each cc. containing 2 mg., and in tablets containing 1 mg. Hoffmann-La Roche, Inc., Nutley, N. J. (Jour. A. M. A., August 16, 1930, p. 485.)

Antimeningococcic Serum.—Antimeningococcic serum (New and Nonofficial Remedies, 1930, p. 350) marketed in packages of two 15 cc. syringes with apparatus for intraspinal injection; in packages of one 50 cc. double-ended vial with apparatus for intraspinal injection. National Drug Co., Philadelphia.

Mercurochrome Suppository-Aces.—Suppositories representing a 2 per cent solution of mercurochrome—220 soluble (New and Nonofficial Remedies, 1930, p. 271) in a slightly aromatized, hydroglycero-gelatin base; each suppository weighs approximately 6.5 Gm. (100 grains). Aces Laboratory, Inc., Brooklyn, N. Y. (Jour. A. M. A., August 23, 1930, p. 594.)

White's Cod Liver Oil Concentrate.—A cod liver oil concentrate in the form of tablets (wafers), each containing not less than 250 vitamin A units and not less than 100 vitamin D units. White's cod liver oil concentrate possesses properties similar to those of cod liver oil so far as these depend on the fat soluble vitamin content of the latter. White Laboratories, Inc., Gloucester, Mass. (Jour. A. M. A., August 30, 1930, p. 663.)

### Foods

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

Heinz Rice Flakes Prepared with Pure Rice Cellulose (H. J. Heinz Co., Pittsburgh.) A flaked rice containing added rice cellulose, yeast, salt and milk sugar. Milled rice, rice cellulose (7 per cent of weight of rice), yeast (7 per cent), table salt (2.75 per cent), and milk sugar (0.5 per cent) are cooked, dried, flaked, toasted, cooled and packed. The product is a breakfast cereal containing indigestible cellulose that is claimed to be less irritant than wheat bran. It is proposed for use in an anticonstipative diet.

Ry-Krisp (Ralston Purina Co., St. Louis.) A whole rye grain wafer flavored with salt. Ry-Krisp

may be used in cases of wheat allergy. The wafers encourage thorough chewing.

Merrell-Soule Powdered Skim Milk (The Borden Co., New York.) A standard, uniform, practically fat free, powdered skim milk. It contains fat 1.0 per cent, protein 36.5 per cent, lactose 51.8 per cent, mineral matter 7.9 per cent, moisture 2.5 per cent. The product is offered as a near approach to a fat-free milk.

Curtice Brothers Certified Nursery Foods (Curtice Bros. Co., Rochester, N. Y.) Sieved spinach, carrots and tomato, and vegetable puree. The water content approximates that of the raw vegetables. These foods are stated by the manufacturer to be especially prepared for babies and young children. The manufacturer guarantees a declared minimum number of units of vitamins A, B and C. This information is declared on the label of the cans.

Alp Rose Canned Foods (John Sexton & Co., Chicago.) These are canned fruits and vegetables, packed in water without added sugar or salt, and intended for use in restricted diets. The label declares the average composition for available carbohydrates, protein and fat.

Van Camp's Pureed Fruits and Vegetables (Van Camp Packing Co., Indianapolis.) These include purees of peas, spinach, tomatoes, prunes, apricots, carrots with pureed tomatoes and beef broth, and mixed vegetables with beef broth. These foods are designed by the manufacturer to influence the greater use of certain vegetables of good nutritional value. They are intended to provide them in smooth diet form and are chosen for their vitamin values. (Jour. A. M. A., August 16, 1930, p. 485.)

Sun Wheat Biscuits (Canada Biscuit Co., Ltd., London, Ont.) A wheat biscuit with unusual vitamin and calcium content.

Sunwheats (The Sawyer Biscuit Co., Chicago.) Sunwheats is the brand name for Sun Wheat Biscuits manufactured for distribution in the United States.

Horlick's Malted Milk (Horlick's Malted Milk Corporation, Racine, Wis.) The product is a dried milk and extract of malted barley and wheat. Horlick's Malted Milk is claimed to be a nutritious food and when taken hot before retiring to be helpful for inducing sleep, and to be valuable in diets for undernourished, nervous patients, those afflicted with wasting diseases, invalids and convalescents.

Horlick's Sweet Chocolate Flavored Malted Milk. (Horlick's Malted Milk Corporation, Racine, Wis.) The product is Horlick's Malted Milk flavored with cocoa. Its composition is essentially that of Horlick's Malted Milk.

Grape-Nuts. (General Foods Corporation, New York; Postum Co., Inc., Battle Creek, Mich.) A breakfast cereal of whole wheat and malted barley. The manufacturer offers Grape-Nuts as an energy food providing proteins, the mineral elements of wheat and barley, and vitamin B. (Jour. A. M. A., August 23, 1930, p. 595.)



*Accepted Devices for Physical Therapy*

The following have been accepted by the Council on Physical Therapy of the American Medical Association for inclusion in its list of accepted devices for physical therapy:

**Austin's Irrigators.**—Austin's Irrigators (W. D. Peattie, Inc., Cleveland, Ohio) are designed for "dilating the sphincter muscles" and "for continuous irrigations" particularly in "the use of extreme temperatures in (irrigating) liquids". It is claimed for the apparatus (1) that complete dilation and thorough cleansing is accomplished; (2) that the vaginal types permit long uninterrupted douching; (3) that the rectal types permit long uninterrupted irrigation; (4) that they are made of material which permits the use of irrigating liquids of high or low temperature; (5) that the apparatus may be taken apart and sterilized thoroughly; (6) that it is easily tolerated by the patient; (7) that any soluble antiseptic may be used; and (8) that the irrigators or tips can be made a part of any irrigating apparatus. The Council on Physical Therapy believes that these claims are reasonable and not unwarranted. (Jour. A. M. A., August 2, 1930, p. 343.)

**Sorensen Therapeutic Inhaler No. 922.**—The Sorensen Therapeutic Inhaler No. 922 (C. M. Sorensen Co., Inc., Long Island City, N. Y.) is stated to be an electrical instrument giving warm, dry air for the vaporization of inhalants. The device is constructed to heat air in sufficient volume to permit of deep and continued breathing direct from the applicators, thus providing the mucosa with a continuous supply of warm air or of warm medicated vapor. It is designed to operate on a 100 to 125 volts, alternating or direct current, and its power consumption is less than 15 watts.

**Sorensen Therapeutic Heater No. 921.**—The Sorensen Therapeutic Heater No. 921 (C. M. Sorensen Co., Inc., Long Island City, N. Y.) is similar to the Sorensen Therapeutic Inhaler. It is different in that the cold air, instead of being drawn through a heating chamber is forced through by some type of air compressor. It is claimed to be of value in the treatment of those diseases of the middle ear where the application of warm dry air, or warm medicated vapor, is indicated. (Jour. A. M. A., August 9, 1930, p. 413.)

**Sunlit Ultraviolet Glass.**—The Window glass known as "Sunlit" (Semon Bache & Co., New York) is stated to be a glass that transmits the biologic ultraviolet rays of the sun. According to a test conducted by the Bureau of Standards this glass does transmit an appreciable percentage of the solar rays which have been shown to have antirachitic properties. (Jour. A. M. A., August 16, 1930, p. 484.)

*Propaganda for Reform*

**Atrophy of the Liver Due to Cinchophen Preparations.**—When concophen was introduced into therapeutics (reinforced by the trade name "Atophan"—

the tophi remover) its striking effect on the elimination of uric acid captured the clinical imagination. It was soon seen, however, that the Atophan labeled its name for the tophi refused to be removed. The drug was found, however, to be an effective analgesic. Various esters and derivatives were advertised extensively for the benefit of those who do not like the flavor of cinchophen and for the benefit of the manufacturers who could establish a monopoly on each little change. Cinchophen became a household remedy in the belief that it could do no harm. In 1923 evidence became available that the drug was causing fatal hepatitis. Since there are many other analgesics about as effective as cinchophen in many cases, and without this insidious danger, the use of the drug should be avoided whenever possible. Unfortunately, this is not simple, for a physician may be easily led into prescribing cinchophen when he does not know it. He may avoid it under the official names of cinchophen and neocinchophen or the original, therapeutically misinforming names of Atophan and Novatophan, but can he be expected to keep in mind all the noninforming names which manufacturers invent? This illustrates the importance of the rule of the Council on Pharmacy and Chemistry which permits not more than one trade name—that applied by the discoverer. The rule protects those that use New and Nonofficial Remedies, but can do little for others. The case is even worse for the patent medicines that are advertised to the public. While physicians, now that they have been warned will restrict the use cinchophen and watch for the first signs of danger, cinchophen preparations may be sold to the public in mixtures of secret composition. (Jour. A. M. A., August 2, 1930, p. 345.)

**The Testimonial Industry.**—Two or three years ago certain members of the medical profession were asked to answer a question that they were wholly incompetent to answer. The question was whether, in their judgment, the "toasting" process alleged to be applied to the tobacco in "Lucky Strike Cigarettes" was likely to free the cigarettes from irritation to the throat. In addition to the questionnaire, the doctors received a carton of 100 cigarettes. The Lucky Strike people now claim that over 18,000 physicians answered the question given in the affirmative. Today physicians in the south and possibly other sections of the country are being circularized by the concern which exploits "Ironized Yeast". "Ironized Yeast" belongs to the get-plump-quick class of nostrums. It is a mixture of yeast and iron. It also contains phenolphthalein. The circular letter that the Ironized Yeast Company is sending out to physicians starts out with this rather crude offer: "A GIFT WORTH \$10 FOR YOU FOR JUST A LITTLE INFORMATION." The physicians are then asked to answer two questions, the answers evidently to be used in the exploitation of Ironized Yeast. For the answers written on his own stationery, the physician is offered "a luxurious flacon of exquisite French perfume—TOURT PARIS DE GUIMET, regularly sold at \$10." Will the medical profession bite? (Jour. A. M. A., August 30, 1930, p. 679.)

## WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

President.....	Mrs. Chas. C. Harrold, Macon	Recording Sec.....	Mrs. J. Cox Wall, Eastman
President-Elect.....	Mrs. Ralston Lattimore, Savannah	Cor. Sec.....	Mrs. Wm. R. Dancy, Savannah
First Vice-President.....	Mrs. S. T. R. Revell, Louisville	Treasurer.....	Mrs. Ben Bashinski, Macon
Second Vice-President.....	Mrs. W. W. Battey, Sr., Augusta	Parliamentarian.....	Mrs. A. H. Bunce, Atlanta
Third Vice-President.....	Mrs. J. E. Penland, Waycross	Editor.....	Mrs. C. W. Roberts, Atlanta

### THE ELLIS HEALTH LAW\*

Many meetings have been held and the leading people of the state and nation have gathered together in an effort to solve the problem as to the best method to render efficient help to the under-privileged child. All honor to these earnest, kind, and faithful men and women, by whose efforts much has been accomplished. Yet it seems to me, and I am one of the least among these workers, that much of our information and inspiration is still in the abstract rather than in a concrete form.

We realize that there is much to be done from the mental, physical, and spiritual standpoints and are not only willing but anxious to meet these obligations. Much of our energy and enthusiasm is lost by not being directed in definite channels.

I want to talk to you about the physical side of the under-privileged child. Not because it is the most important, but the development of the mental and spiritual to a large extent depends upon the physical well-being.

I am persuaded that the greatest amount of good that can be done for the greatest number of children by any single act would be the passage of the Ellis Health Law. However, with this as with the most things in life, there are two sides to the question and I am hoping that it might be worth our while to more or less minutely and in the simplest language, discuss what the Ellis Health Law is, so we may more intelligently decide as to whether we want it or not, and have a better understanding of the benefits we may expect if we adopt this law.

The Ellis Health Law was passed in 1914 and all laws in conflict with this act were repealed. It has four main provisions, namely: to revise the health laws of the State of Georgia; to provide for the appointment of a State Board of Health; to provide for a County Board of Health, and to appoint a Commissioner of Health, the latter being fre-

quently known as a county physician or health officer.

The first two are already in operation and we are only concerned about the last two. This law cannot become operative in any county without the recommendations of two successive grand juries. Parenthetically, it might be well to state here that after the adoption of the Ellis Health Law it may be repealed in the same way.

The County Board of Health is composed of three, two of whom shall be members, by virtue of their offices, the county school superintendent and the chairman of the Board of Roads and Revenue, and the third must be a reputable physician elected by the grand jury. The physician holds office for the term of four years and until his successor is elected and qualified.

The duties of the County Board of Health are the supervision of all matters relating to health and sanitation with authority to declare and enforce quarantine and to enforce all other provisions of the Ellis Health Law. The chief provisions are the election of a Commissioner of Health, and seeing that he performs the duties of his office and determines the amount of funds necessary to meet the requirements of this act. This money shall be raised by a tax levy at the same time and in the same manner as is now prescribed by law for the collection of taxes for other purposes. It further provides that in the absence of an appropriation therefor the salaries and expenses provided for shall be paid out of the general funds of the county, not otherwise appropriated.

The County Board of Health shall hold their regular sessions on the first Thursdays of January, April, July, and October; also at any time when an emergency or necessity may arise. They shall receive as their compensation the sum of \$2.00 per diem while actually engaged in the performance of the duties of the Board. The Commissioner of Health is appointed from a list of eligible physicians furnished by the State Board of Health. To be eligible one must be a licensed physician, temperate, and of good moral

\*Read before a meeting of the Woman's Auxiliary to the Jefferson County Medical Society, Louisville, July 17, 1930. Also before the Woman's Federated Clubs.



character; who has passed a special examination on hygiene, sanitation, and State health laws. The Commissioner of Health is required to devote his entire time to the duties of the office and shall not engage in private medical practice or actively in any other line of business. He shall have the authority of a constable in the county in all matters pertaining to public health and in the enforcement of health laws.

The duties are numerous, some of which are these: to inspect at least once every six months all public buildings and institutions and see that all health laws are enforced. Particularly in jails, convict camps, and other places of detention. Once each year, or oftener, he must make a sanitary survey of all buildings, grounds, and water supply of all schools, and shall have the power to close any school where conditions are such as to endanger the health of the children. He has authority to establish quarantine and close schools, churches, or theaters to prevent or stay epidemics. All hotels, inns, depots, and other places where food is sold must be inspected and the pure food laws enforced. Every year, he must deliver one or more lectures to each school on contagious and infectious diseases, the part played by flies and mosquitoes carrying and transmitting diseases and on general matters of health and sanitation, and instruct mothers in the care and feeding of infants as well as their own physical welfare. Vital statistics shall be kept. Records of births, deaths, statistics on insanity, feeble-mindedness, tuberculosis, and other infectious diseases. Statement of all expenditures shall be submitted to the County Board of Health and permanent records of all work shall be kept in book form. Teachers and janitors in the public schools shall be examined for contagious and infectious diseases. School children shall be examined for intestinal parasites, defects of eyes, ears, nose, throat, lungs, and teeth as well as other physical defects. Copies of reports of such examinations shall be forwarded to the State Board of Health, County Board of Health, the school board, and parents of the children. Child health conferences for babies and pre-school children shall be held and prenatal advice given to expectant mothers.

Medical treatment is not given, except diphtheria toxin-antitoxin, typhoid, and smallpox vaccines.

You can readily see from the duties mentioned that the work of the Commissioner of Health is varied and exacting, and as the laborer is worthy of his hire, let's consider his compensation.

His salary is fixed by the County Board of Health and must not be less than \$1,200

per annum. Dr. T. F. Abercrombie, Secretary of the State Board of Health, states that salaries for work run from \$2,000 to \$4,000 per annum in the various counties where the law has been adopted. There must be appropriated not less than \$500 for office and traveling expenses besides furnishing an office and its equipment. Let us estimate the total expenditure to be \$5,000 per annum. It may be less. It will not be more.

Viewing this through my financial spectacles, it seems a huge sum. Is it worth the price? For lack of time we will only consider one of the benefits to be derived therefrom. For instance, let's take the examination of the lungs. Here is a little fellow just starting to school. He comes from a home devoid of not only the comforts of life but the necessities. He appears lazy and listless and his mother is sure that he was just born tired and hopes that the teacher will make him work. The Commissioner of Health examines the little fellow and his diagnosis is incipient tuberculosis. The physician goes to see his mother and explains that her boy is sick with a malady that is hopeless unless properly treated now; that delay is fatal, that he must be taken out of school, that proper nourishment, rest, and sunshine are essential. Charitable organizations supply the necessary financial assistance and the child is given his chance for "life, liberty, and the pursuit of happiness".

Do I hear you say that this sounds appealing and like it is an argument favoring the passage of the Ellis Health Law?

We hear and read much of the underprivileged child these days and they are beautiful sentiments; but if you haven't got a dollar, you haven't; and besides that isn't my responsibility. We failed to recall the words of Edgar Guest when he said:

"If nobody smiled and nobody cheered and nobody helped us along;  
If each, every minute looked after himself and the good things all went to the strong;  
If nobody cared just a little for you and nobody thought about me,  
And we stood all alone to the battle of life, what a dreary old world this would be."

We failed to remember these words and we cast our vote against the adoption of the Ellis Health Law.

It is true that it would cost us money for an expenditure of \$5,000—if there are no funds to be used for this purpose, would necessitate a tax levy of one mill or that we would have to pay one dollar on every thousand dollars worth of property.

But to go on with the other side of the



story in the county that has no Ellis Health Law in effect. This little boy with incipient tuberculosis continued to go to school. Nobody knew he had it and no one had the power to prevent his attendance if they had known it. He struggled on, in and out of school, and couldn't bring up his work, stayed in that grade two years and a part of the third, but the third was finished in the "Great Beyond". One of our citizens had passed on. During the short years of his education what money paid for those two and one-half years of schooling that should have been done in one year? The taxes of the people of the county. The end is not yet. This is not all. During his time at school Johnny sat with little Tom, a bright-eyed, darling little fellow, generous and lovable, and if Johnny didn't have a pencil, Tom was glad to lend him his and would even give him a suck of his lolly-pop, and the days passed on filled with such instances. Tom's mother was an intelligent woman and she noticed Tom looking depleted, spring fever, she thought. If he didn't improve, she was going to consult her doctor tomorrow, but tomorrow never came. Procrastination is not only the thief of time, but often of life. Many a dollar was spent in an effort to restore their boy to health. I wonder—don't you—if that dollar wouldn't have been a better investment in preventive rather than in curative treatment.

If Tom had been your child or mine, I believe that we would not be quite so sure that the responsibility of looking after the health of the school children as a whole is not ours, though the dollars are scarce and the struggle hard.

Did you know that for a long time there was no place in this great commonwealth of ours for a tubercular child? It is estimated that there are sixty thousand of these children in Georgia.

We are all happy that the Masons relieved this terrible situation by the gift of a cottage at Alto for these unfortunate children. It must have been a joyous privilege to be able to help in such a glorious undertaking.

But all of us are not Masons and some who were could not render financial assistance and yet there is a service which is open unto who-so-ever-will and this service is broader in its protection and help. It is not confined to the tubercular child, but to helpless children who are handicapped from any disease, nay even more than this, help goes out to all the children in this grand old State, by throwing the arms of prevention around them and this can be brought about by each of us making it our individual responsibility

to bring all possible influence on the jurors until the Ellis Health Law has been adopted by every county in Georgia.

Please think of the things I have said and then in the words of Oliver Wendell Holmes:

"Reject, what in them is false,  
Examine what is doubtful,  
Remember what is true,  
And so God bless you."

MRS. S. T. R. REVELL, *Louisville,*  
*Chairman of Health Education of the*  
*Woman's Auxiliary to the Medical*  
*Association of Georgia.*

## COUNTY SOCIETIES 1930 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 5, 1929.
2. Barrow County, Dr. W. L. Mathews, Winder, December 5, 1929.
3. Dougherty County, Dr. I. M. Lucas, Albany, December 28, 1929.
4. Lamar County, Dr. J. M. Rogers, Barnesville, January 6, 1930.
5. Turner County, Dr. J. H. Baxter, Ashburn, February 10, 1930.
6. Monroe County, J. O. Elrod, Forsyth, February 18, 1930.
7. Wayne County, Dr. A. J. Gordon, Jesup, March 20, 1930.
8. Stephens County, Dr. C. L. Ayers, Toccoa, April 2, 1930.
9. Upson County, Dr. R. L. Carter, Thomaston, April 3, 1930.
10. Lowndes County, Dr. Bennett G. Owens, Valdosta, May 5, 1930.
11. Ware County, Dr. W. L. Pomeroy, Waycross, May 21, 1930.
12. Cobb County, Dr. L. L. Welch, Marietta, August 2, 1930.
13. Crisp County, Dr. J. N. Dorminy, Cordele, September 6, 1930.
14. Terrell County, Dr. Logan Thomas, Dawson, September 13, 1930.

## 1931 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 4, 1930.

## SUPRARENAL CORTEX AND TUMOR

William H. Woglom, New York (*Journal A. M. A.*, August 16, 1930), describes briefly a repetition of the experiments of Arloing and his colleagues and concludes by stating that the suprarenal glands of rabbits that have undergone preliminary treatment with carcinoma 63 or sarcoma 180 have no demonstrable inhibitory effect on the growth of these tumors in mice.

\*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

# BOOK REVIEWS AND ABSTRACTS

## BOOK REVIEWS

*The Tragic Era*, by Claude G. Bowers.  
(Houghton Mifflin Company)

Rarely have we read a book so full of important and intensely interesting information as we find in the 540 pages of *The Tragic Era*, by Claude G. Bowers. It holds one almost like *The Three Guardsmen*, with the significant difference that Dumas' masterpiece is fiction while every word of Bowers' work is based on substantiated record. Not only is this a record which one should wish to possess as a matter of historical knowledge, but it is a record which no southern man or woman must fail to know. The things talked of were only too well known to our fathers and grandfathers, but a new generation has now arisen ignorant of the events of those times unless enlightened by such a book.

*The Tragic Era* deals with the story of reconstruction in the South from the time of the assassination of Abraham Lincoln in 1865 to the seating of Rutherford Hayes as president of the United States in 1876. The sub-title is appropriately worded "the revolution after Lincoln." The revolution consisted in the effort of the enemies of Lincoln, led by the south-hating radical, Thaddeus Stephens, to overthrow the conciliatory policies of the martyred president, championed so courageously by his successor, Andrew Johnson.

Whatever criticism may be brought against history and biography as written today, in dethroning the heroes of the past, it must be granted that marked improvement has been shown in supporting every statement with authoritative references. Older books of the kind, even by famous historians, often failed to quote authorities. Things were written to sound well, regardless of the facts. Of one such author it was said that he would tell a lie to round a period.

*The Tragic Era* teems with references. They appear on every page, often in profusion, while a list of more than two hundred manuscripts, books and magazines is furnished which were consulted in preparing the work. The author's access to the unpublished diary of George W. Julian, which covers the whole period, allows him to make use of data which has been denied other writers.

The volume is not one for casual reading; rather is it an absorbing text-book to be studied and re-read. The example of the great Napoleon in reading a book is one which we all might follow with profit. Napoleon felt that if a book were worth reading at all it should be read as if one expected to stand an examination on it. He read in this manner, making notes of the things he wished to remember.

*The Tragic Era* gives a vivid picture of the post-bellum crisis, not only of its exciting and complicated politics, but of its social life as well, both in Washington and in the South. Accurate portraits are drawn of the principal actors in the drama, some of whom appear

as good men, but most of whom seem very bad. Thad Stephens and Andrew Johnson are given the most space. The former was the powerful, dreaded leader of the faction striving to treat the South as a subjugated enemy, often a pathetic figure, but regarded as sincere and honest. The vindication of Johnson is something to be applauded by all fair-minded, loyal Americans, his impeachment trial being called "the great American farce." We learn much about Chief Justice Chase, Charles Sumner, Benjamin Butler, Wade, Beecher, Stanton, Morton, Blaine, U. S. Grant and others.

Georgians will be particularly interested in the fine tribute paid Benjamin Harvey Hill. No statesman of the times commanded greater respect for his character and ability, either in the North or the South. As an orator he had no superior. The story of reconstruction in Georgia reflects honor upon some of its citizens, but consigns others to obloquy.

The methods of the carpetbaggers are described in all their infamy, the antidote being the inspiring tale of the original Ku Klux Klan, how it started and how it succeeded. Its mission was vital and was well performed.

One who reads and understands this book, and commits parts of it to memory, will always be well prepared to discuss reconstruction in the South, with fairness and with vehemence. It was a stupendous task to write it, but the author must feel abundantly rewarded, not only by its remunerative sale, but by the satisfaction of having compiled and presented so admirably such momentous facts.

FRANK K. BOLAND, M.D.

*Minor Surgery*, by Frederick Christopher, M. D. F. A. C. S. 1929, W. B. Saunders and Co., Philadelphia and London. 694 pages. Price, \$8.00.

This volume combines the advantages of a system of surgery with the practical application of the author's own experience on the various subjects discussed. In discussing furuncles and carbuncles, for instance, a general resume of the current literature on methods of treatment with summaries of several different methods is given and criticized in the light of the author's experience. The usual subjects dealt with in a minor surgery are treated in this manner. In addition there is a chapter on minor surgical technique and a special chapter for the surgical interne. It is a useful volume for the general practitioner or student.

J. C. MASSEE, M.D.

## BOOKS RECEIVED

*The Principles and Practice of Medicine*, designed for the use of practitioners and students of medicine, originally written by the late Sir William Osler, M.D., F. R. S., formerly Fellow of the Royal College of Physicians, London; Regius Professor of Medicine.

Oxford University; Honorary Professor of Medicine, Johns Hopkins University, Baltimore; Professor of the Institutes of Medicine, McGill University, Montreal; and Professor of Clinical Medicine in the University of Pennsylvania. Eleventh edition revised by Thomas McRae, M.D., Fellow of the Royal College of Physicians, London; Professor of Medicine, Jefferson Medical College, Philadelphia; Physician to the Jefferson and Pennsylvania Hospitals, Philadelphia; formerly Associate Professor of Medicine, Johns Hopkins University. Contains 1,237 pages. Publishers: D. Appleton & Company, 35 West 32nd Street, New York City.

*Physical Diagnosis*, by Richard C. Cabot, M.D., Professor of Clinical Medicine in Harvard University, formerly Chief of the West Medical Service at the Massachusetts General Hospital. Tenth edition, revised and enlarged, with six plates and 279 figures in the text. Publishers: William Wood & Company, 156 Fifth Avenue, New York City. Price, \$5.00.

*A Text Book of Histology*, by Harvey Ernest Jordan, A.M., Ph.D., Professor of Histology and Embryology, University of Virginia. Contains 857 pages with 594 illustrations in the text and four plates. Publishers: D. Appleton & Company, 35 West 32nd Street, New York City.

*Diseases of the Genito-Urinary System in Infancy and Childhood*, by Henry F. Helmholtz, M.D., Professor of Pediatrics, University of Minnesota (The Mayo Foundation); Associate, Section of Pediatrics, the Mayo Clinic, Rochester, Minn., and Samuel Amberg, M.D., Associate Professor of Pediatrics, University of Minnesota (The Mayo Foundation); head of Section on Pediatrics, the Mayo Clinic, Rochester, Minn. Supervising Editor, Royal Storrs Haynes, Ph.B., M.D., Clinical Professor of Diseases of Children, College of Physicians and Surgeons, Columbia University, New York. Contains 239 pages. Publishers: D. Appleton & Company, 35 West 32nd Street, New York City.

*Laboratory Pediatrics*, by John D. Lyttle, A.B., M.D., Assistant Clinical Professor of Diseases of Children, College of Physicians and Surgeons, Columbia University, New York; Assistant Attending Physician, Babies Hospital, Medical Center, New York City. Volume XX. Contains 189 pages. Publishers: D. Appleton & Company, 35 West 32nd Street, New York City.

*Diseases of the Skin*. A text-book for Practitioners and Students. By George Clinton Andrews, A.B., M.D., Associate Professor of Dermatology, College of Physicians and Surgeons, Columbia University; Consulting Dermatologist and Syphilologist to Harrytown Hospital; to St. John's Hospital, Yonkers; to Glassland's Hospital; and to the Broad Street Hospital, New York City. 1,091 pages with 988 illustrations. Philadelphia and London: W. B. Saunders Company,

1930. Cloth, \$12.00 net. Publishers: W. B. Saunders Company, West Washington Square, Philadelphia, Penn.

# NEWS ITEMS

Dr. J. R. Wilson announces his removal from Homerville to Patterson.

Dr. H. F. Hope, Atlanta, examined three hundred children during August who were to enter the Fulton County schools this fall for the first time. All defects were noted and will be followed up by Mrs. Iverson Case, in charge of the welfare work of the county schools.

Dr. J. P. Kennedy, City Health Officer of Atlanta, has returned from an extended tour of Europe which he made with a party representing the American Public Health Association. He found health conditions in many countries not so good as in the United States, but was impressed with the cleanliness and good conditions in Berlin.

Dr. Glenn Frank, President of the University of Wisconsin, gave a report of the joint committee on health problems by the American Medical Association and the National Education Association which in part follows: The nation's death rate has been cut in half since 1900. Before 1900, the nation's death rate ran from 20 to 30 per thousand. In 1923, the nation's death rate had dropped to 12 per thousand. In 1900, sixteen of every hundred babies died before reaching one year of age. Now only seven of every hundred die before reaching their first birthday. In 1900, tuberculosis took the lives of 194 out of every 100,000, today only 79 of every 100,000 die of tuberculosis. The death rate from typhoid and paratyphoid has dropped from 34 per 100,000 in 1900 to less than 5 per 100,000 in 1928.

Dr. Richard Binion, Milledgeville, has been appointed by Governor L. G. Hardman as a member of the Board of Trustees for the Georgia State Sanitarium, Milledgeville.

The Richmond County Medical Society held its monthly meeting at the University Hospital, Augusta, on September 18th. Dr. A. C. Wade, Augusta, read a paper entitled "Gonorrhea in the Female".

The Randolph County Medical Society again heads the honor roll for 1931 which has apparently been its fixed location for a number of years.

The Richmond County Medical Society held its regular monthly meeting in the Nurses' Lecture Room of the University Hospital, Augusta, August 21st. Dr. Haven Emerson, New York, professor of Public Health Administration, Columbia University College of Physicians and Surgeons, gave a lecture, entitled "Periodic Health Examinations".

The Eighth District Medical Society held its summer meeting at the Washington Country Club, Washington, on August 13th. The scientific program was made up of the following titles for papers: "Import-



ance of Early Care of Eye Injuries." by Dr. W. H. Cabaniss, Athens; "Typhoid Fever Complicated by Intestinal Infection," by Dr. B. C. Teasley, Hartwell; "Typhoid Carriers," by Dr. T. H. Johnson, Athens; addresses by Dr. Harold I. Reynolds, Athens, President of the Eighth District Medical Society, and Dr. G. Y. Moore, Cuthbert, President of the Association.

Dr. Keith C. Rice announces the removal of his office to suite 110 Medical Arts Building, Atlanta.

Dr. and Mrs. J. B. Jackson, Clarkesville, entertained the members of the Habersham County Medical Society at their home on August 1st.

The members of the Washington County Medical Society, Woman's Auxiliary and visiting physicians were entertained at the Santon Hotel, Sandersville, by the Lions Club on August 6th. Members of the State Board of Health and others interested in health work attended the malaria conference held in Sandersville at that time.

The Pennsylvania Hospital, Philadelphia, announces the opening of its Institute for Mental Hygiene. Its object is to find a new type of medical patient and a fair rate of charges for patients in moderate means. The institute is planned for patients who will meet the physicians more than half-way in recognizing that they need help—for fatigue, fears, worries, maladjustments, difficulties in getting on with other people or at their work.

The Tenth District Medical Society held its summer meeting at Louisville, August 28th. The following titles for papers were on the scientific program: "Malaria as Seen in Jefferson County," by Dr. S. C. Ketchin, Louisville; "Laboratory Diagnosis and Treatment of Malaria," by Dr. H. G. Mealing, Augusta; "Malaria Fever," by Dr. J. Dewey Gray, Augusta; "Lobar Pneumonia," by Dr. Irvin Phinizy, Augusta; "Infant Feeding," by Dr. C. M. Burpee, Augusta; "A Standard Treatment of Early Syphilis," by Dr. W. R. Houston, Augusta; "Plastic Surgery of the Temporomandibular Joints," by Dr. Everard A. Wilcox, Augusta; "Cancer," by Dr. R. L. Rhodes, Augusta.

The Garvan Cancer Research Laboratory associated with the Surgical Pathological Laboratory of Johns Hopkins University and Johns Hopkins Hospital, Baltimore, gave demonstrations of bone tumors at the Belvedere Hotel, Baltimore, on September 15, 16, 17. Dr. Joseph C. Bloodgood announces that other demonstrations in tissue diagnosis will be given in the laboratory during Christmas and Easter vacations.

The State Tuberculosis Sanatorium, Alto, is offering itinerant tuberculosis clinics to the people in Georgia. The work will be under the direction of Dr. M. F. Haygood, Superintendent of the sanatorium at Alto.

Emory University School of Medicine will open its ninety-fourth session on September 23rd. Dr. Roy R. Kracke, former Associate Professor of Bacteriology and Pathology, will be acting head of the department.

Dr. Russell H. Oppenheimer, Dean, will be Professor of Medicine, Dr. Dan C. Elkin, head of the department of Surgery, and Dr. Jas. R. McCord, of the department of obstetrics.

Dr. and Mrs. G. W. Willis, Ocilla, entertained the members of the Ben Hill County Medical Society at their home on August 5th.

The Millen Hospital, Millen, held its regular monthly staff meeting on August 19th in the dining room. Many of the physicians of adjacent counties were present and joined in the discussion of case reports on hemorrhagic fever, strangulated hernia, Ludwig's angina, and complete prolapse. Dinner was served.

The Randolph County Medical Society held its monthly meeting on September 4th. The scientific program consisted of a symposium on Typhoid Fever.

Dr. Frank A. Blalock, formerly of Adairsville, has opened offices in suite 505-6 Bibb Building, Macon. His practice will be limited to pediatrics.

The American Association for the Study of Goiter at its meeting held at Seattle, Washington, awarded a prize of \$300.00 to Dr. Wm. F. Reinhoff, Jr., Johns Hopkins University, Baltimore, for the best essay dealing with goiter. Drs. P. Kimball, Cleveland, Ohio; E. P. and D. R. McCullagh, Cleveland Clinic Foundation, Cleveland, Ohio; Robert P. Ball, University of Louisville, Louisville, Ky., received honorable mention.

Dr. H. C. Pearson, formerly of Cartersville, is associated on the staff of the United States Naval Hospital, Florida.

The Hall County Medical Society held its regular monthly meeting at the Princeton Hotel, Gainesville, on August 27th.

## NINTH DISTRICT MEDICAL SOCIETY

Two meetings are held annually in the Ninth District, in March and September. The March meeting was held at Commerce. Dr. Stewart Roberts, Atlanta, and Dr. Stewart D. Brown, Royston, read papers on "Hypertension" and "Gastric Ulcer", respectively. Other physicians appearing on the program were: Dr. S. T. Ross, Winder; Dr. W. T. Randolph, Winder, and Dr. Laetus Sanders, Commerce. The Jackson County Medical Society was host at a luncheon given at the Hotel Commerce. Dr. F. M. Hubbard, Commerce, "Dean of the Ninth," was elected President; Dr. A. A. Rogers, Commerce, was elected Vice-President; Dr. J. C. Bennett, Jefferson, re-elected Secretary-Treasurer. The fall meeting was held at Toccoa on September 17th. The members were entertained by the Stephens County Medical Society.

# Medical Association of Georgia

Next Annual Session, Atlanta, Ga., May 12, 13, 14, 15, 1931

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## DELEGATES TO THE A. M. A.

Wm. H. Myers (1931-2).....	Savannah	Alternate, C. W. Roberts.....	Atlanta
Alternate, Wm. A. Mulherin.....	Augusta	O. H. Weaver (1930-1).....	Macon
E. C. Thrash (1931-2).....	Atlanta	Alternate, C. K. Sharp.....	Arlington

## COUNCIL

M. M. Head, Chairman.....	Zebulon	C. L. Ayers, Clerk.....	Toccoa
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3. J. C. Patterson (1933).....	Cuthbert
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5. E. C. Thrash (1931).....	Atlanta
6. M. M. Head (1931).....	Zebulon
7. M. M. McCord (1931).....	Rome
8. H. M. Fullilove (1931).....	Athens
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10. S. J. Lewis (1932).....	Augusta
11. A. S. M. Coleman (1932).....	Douglas
12. J. Cox Wall (1932).....	Eastman

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5. W. A. Selman (1931).....	Atlanta
6. K. S. Hunt (1931).....	Griffin
7. W. H. Perkinson (1931).....	Marietta
8. Paul L. Holliday (1931).....	Athens
9. J. K. Burns, Jr. (1932).....	Gainesville
10. H. D. Allen, Jr. (1932).....	Milledgeville
11. K. McCullough (1932).....	Waycross
12. J. W. Edmondson (1932).....	Dublin

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Craig Barrow (1931).....	Savannah
Frank K. Boland (1932).....	Atlanta
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### Crawford W. Long Memorial Prize

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George Bachmann.....	Atlanta
R. V. Lamar.....	Augusta

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H. G. Weaver.....	Macon
R. M. Harbin.....	Rome
Stewart D. Brown.....	Royston
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### Fraternal Delegates to Other State Meetings

To Visit Alabama: J. Cox Wall, Eastman; Jas. A. Fountain, Macon.
To Visit Florida: Gordon Chason, Bainbridge; W. F. Reavis, Waycross.
To Visit North Carolina: R. L. Miller, Waynesboro; S. A. Boland, Thomson.
To Visit South Carolina: Stewart R. Roberts, Atlanta; A. G. Fort, Atlanta.
To Visit Tennessee: M. M. McCord, Rome; Joe. P. Bowdoin, Adairsville.

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Joseph L. Miller, Chicago Jour. A. M. A., August 16, 1930), asserts that protein therapy has been employed in nearly all acute and chronic diseases of supposed bacterial origin. At present it is used especially in acute polyarthritis, gonorrheal arthritis, the infectious type of chronic arthritis during the period of more or less active inflammation, acute iritis, corneal ulcer, thrombo-angiitis obliterans, bacillary dysentery, dementie paralytica, and multiple sclerosis. Probably the most dramatic results are observed in acute polyarthritis, and it is safe to say this is the only method of treatment that can immediately terminate this disease; at least 50 per cent of patients can be promptly relieved of their discomfort.

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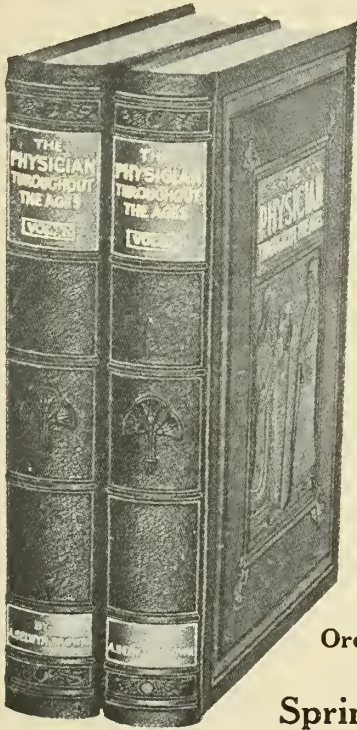
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ADDRESSES



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## CLINICS

### MASTOIDECTOMY: BLOOD CLOT CLOSURE\*

*Clinic*

T. E. OERTEL, M.D.

*Augusta*

Several years ago I was asked to talk to a farmers' club about the mosquito theory of the transmission of malaria. I told them all I knew about it and all anyone else knew about it at that time, quoting various authorities, and when I got through I said I would be glad to answer any questions. An old gentleman sitting down in front said, "Young man, do you mean to say that the only way we can get malaria is by getting bit by a mosquito?" I told him that all the authorities were agreed on that. Then he said, "It may be true, but by gad I don't believe it!" I am afraid that some of you may have the same idea when I finish talking about blood clot closure of a mastoid wound. I have some plaster models here that I will pass around that give some idea of these cases.

You all know that the old method of treating mastoid wounds is to pack them more or less. When I was in France with the A. E. F. I was fortunate enough to meet Dr. H. O. Reik and he told me about this method of closing mastoid wounds. It did not strike me very favorably, but Doctor Reik is so much more skilled than myself that I said I would try it. I have not used any other method since that time.

Of what does the method consist? First of all, a clean operation. Second, it consists

in doing a clean operation. Third, it consists in doing a clean operation. If the operation is not thorough, if you have left detritus or diseased bone you cannot expect to have success. Some operators lay a great deal of stress upon *rapidity* of operative procedures. It seems to me it is better to lay stress on *thoroughness* of operative procedure. It is mastoidectomies of the type called simple, which are not at all simple. It seems to me that Doctor Reik in his recent chapter of Dr. Chevalier Jackson's book on the ear, nose, and throat, hits the nail on the head when, in speaking of this method, he says: "Failure to succeed is not necessarily the fault of the operator; he can be criticised, however, for failure to try." Reik in his own cases puts the good results from the method at 75 per cent. I do not know what percentage I have had, but my results have been almost uniformly good.

In the old method of packing it meant not only torture to the patient but packing the mastoid wound anywhere from four to eight weeks or longer. It means more than this; it means a broad, depressed scar, often an unsightly scar, which the patient must bear for the rest of his life.

What do we get with blood clot closure? This young man (presenting patient) was good enough to come over to let you look at him. I am not ashamed of the results of this mastoidectomy, and think you will agree with me that they are far better than with the old procedure.

The operation consists in doing a clean operation and then in complete closure of the wound, according to Reik's technic, but I have quite uniformly put in a little tissue drain running up into the antrum and out at the lower end of the wound, for this pur-

\*Informal clinic before the Medical Association of Georgia, Augusta, Ga., May 14, 1930.



pose only. The cavity will fill with a blood clot and wherever a clot occurs there is serum pressed from it and I think the drainage facilitates the discharge of this serum and makes the patient more comfortable.

For suture material I use a fish line, an eighteen-pound test braided silk line. I have used this for some time and believe it is better than the ordinary braided silk and there is less trouble with stitch abscess. These stitches are removed, some on the second day, all by the fourth day.

The chief thing is to get primary union, and if you are successful instead of having a wound that is open for six to eight weeks you have a patient who is well, with a linear scar and practically no depression, in eight to ten days.

This patient was interesting because he presented himself with what I thought at first was a streptococcic infection of the canal. He was a sick man and when I went to see him at the hospital the next morning he had a facial erysipelas, beginning on his nose. This spread over the noninfected side and spread later to the infected side. I did not wish to operate while he had that infection. Two weeks later he came back complaining of his ear again and I sent him to the hospital and operated. Despite his history I dared to close the wound and on the eighth postoperative day he left the hospital well.

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#### PSYCHIATRIC CLINIC\*

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*Staff of U. S. Veterans Hospital No. 62*

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*Augusta*

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#### *Chronic Encephalitis*

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DR. R. L. HARRIS: The clinic we have arranged for you is divided into mental and neurological cases.

The first case I wish to present is one of chronic encephalitis (presenting patient). You can see from glancing at this man that he has the Parkinsonian syndrome.

I wish to correct a misnomer in connec-

tion with this disease. It is spoken of as postencephalitis. There is no such thing. The disease is going ahead just as in the beginning, but at first there was marked inflammation and very little degeneration. As you see, in this patient at present there is much degeneration and no inflammation.

First notice the way the patient stands and (asking patient to walk) the way he walks. Notice the way he sits down. You observe that his arms are held perfectly rigid at his sides. As he walks, his arms are not carried in the associated manner that a normal person's are. As he starts forward he does not move as quickly as you or I do.

This disease is in the extrapyramidal system. In the fish there is only the globus pallidus, with no striate nucleus, and the fish goes through life with the pallidal movements. The human could not go through life with the rhythmic pallidal movements of the fish, so there have been added the pressor fibers and the striate fibers that make up the nucleus. If there is a lesion in the pallidum the power of associated movement which we have in walking, sitting, and chewing is lost. This man has a striatal lesion and also a pallidal lesion.

I think this gives you a better picture of the disease than to say that it is the Parkinsonian syndrome and say nothing else. When you understand that he has lost the muscle stretching and fixing mechanism you can better understand what the condition is.

#### *Dementia Praecox*

DR. M. D. CLAYTON: I will have to ask you to take some of the statements that will be made on faith for we will not be able to demonstrate some of the symptoms. It requires weeks and sometimes months to get the symptoms fully developed.

In dementia praecox we have a disease that occurs as early as five years. There are cases on record in which the symptoms were noted at five years, and we have cases in my personal observation in which the symptoms occurred at the age of five. I will not attempt to give you a history, but will mention briefly the classification we use and demonstrate some cases. We have first the simple type and in that we have the indi-

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\*Informal clinic before the Medical Association of Georgia, Augusta, Ga., May 14, 1930.

viduals who are "eccentric", many of the "hoboes", and that type of person. Their complaints are commonly of some physical disorder that we can never lay our hands on, and they are treated for years sometimes for physical ills when they really have the mental symptoms.

*Case 1.*—This first case is classified as simple dementia praecox (presenting patient). This 35-year-old man was carrying on very well as a shipping clerk, but he felt that he was not able to save his money just right and that everything was going to the bad. Since he has been with us he has retained that financial interest. He knows the amount of money he has and the amount of interest it is bearing, and he keeps up his taxes, but he fears he is going to starve. He writes to his relatives and friends and asks them to send him clothing. He accumulated a few dozen shirts through writing to relatives and friends, and he had about eighty pairs of sox. He would save his money. If he had any that was not coming from his own funds he would spend it but if it was from his own funds he did not wish to spend so much. At one time he did not wish to see food wasted and if his neighbor did not eat his portion he would eat that as well as his own. He does not do that now but we have to watch his diet and keep him from eating too much.

*Case 2.*—This young man (presenting patient) exhibits the manneristic, catatonic attitude. This is sometimes accompanied by mutism, which is not apparent here. This man has lost considerable interest but is fairly well satisfied most of the time. He does not have many wants. In the catatonic phase we have usually some motion, there is either over-activity or the fixed attitude. We have in this case the negativism well demonstrated. In the passive negativism the individual does not resist any motion that is made but in the active phase the patient resists motion. In the passive type there is a waxen lack of resistance and the patient will hold the muscle in the fixed position in which you place it until the physiological reaction takes place. Recently some experiments have been carried out whereby some chemicals have been introduced

intravenously. This arouses this type of patient temporarily and it looks as if it could be used for investigation at any rate.

*Case 3.*—This young man (presenting patient) had the classification of the paranoid type. In all types we find some degeneration, and in an examination at present he would probably be classed in the hebephrenic group, for he does not take things seriously.

This man is a financier and he says his father is someone named Herbert Hoover. (Asks patient to talk.) You can see he has created for himself a world of his own and what he does not have he creates. He says he owns the large hotel across the street and the one downtown, but he is not willing to come over and participate in any of the advantages they might offer him.

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### ACUTE OSTEOMYELITIS—ORR'S TREATMENT\*

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*Clinic*

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CHARLES W. CRANE, M.D.

*Augusta*

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You have heard this afternoon about one method of treating acute osteomyelitis of the mastoid, and of course when it comes to a discussion of any one method for treating acute osteomyelitis I do not suppose any one treatment is applicable to all cases. The cases vary greatly as to the bones involved, in their severity and the time at which the surgeon first sees the patient. A great deal of the literature deals with acute and chronic cases and it is very difficult to determine which many authors are talking about.

I wish to present two cases of osteomyelitis of the long bones of both legs, the femur being involved in both instances. One patient had involvement of the opposite tibia and the other had involvement of the fibular of the opposite side. That is of some importance because in looking over the mortality of acute osteomyelitis you will find that most of the patients who die are those

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\*Informal clinic before the Medical Association of Georgia, Augusta, Ga., May 14, 1930.

in whom the femur is involved. I recently read a report of forty cases in which four patients had died with the femur infected. Another thing that has to be considered is the age of the patient. If you look at the statistics carefully you see a great many more cases in which the femur is involved have a fatal termination in the period between ten and fifteen years than in the period between five and ten years. Both of these cases had involvement of the femur and both patients were in the group between ten and fifteen years.

*Case 1.*—J. L., aged 12, was admitted to the Margaret Wright Hospital on September 5, 1929. About six weeks before admission, two weeks before the present illness set in, he had an attack of fever that was diagnosed as malaria. This responded promptly to quinine. Prior to and following this attack he had recurrent crops of boils. His sister stated that about four weeks before he complained of severe pain in the left leg after swimming. The next day he had a high temperature, the left knee was slightly swollen and extremely tender, and any attempt to move the limb caused great pain. About two days later the same sequence of events took place in and around the right knee. During the next four weeks the pain, swelling and tenderness gradually increased in severity and his temperature ranged from 101 to 104 degrees F. daily. During the past few days the temperature had gradually subsided and the temperature range had been lower. Two or three days before the patient's admission to the hospital the attending physician had incised a thin, fluctuating area over the anterior surface of the right tibia, liberating much pus.

Upon admission the child appeared very ill, with his knees and thighs flexed. He was extremely pale and his features were drawn and pinched, with the usual look of fear and suffering common to these patients. The slightest effort to move the lower limbs caused great pain, making him cry out and complain bitterly. His temperature was 101, pulse 110, respirations 24. The white blood count was 18,000. Examination of the left knee revealed much swelling around the

joint, especially posteriorly. The swelling extended upward, involving most of the thigh. Distinct fluctuation could be made out at several points. Examination of the right leg revealed marked swelling around the knee joint and considerable swelling of the upper half of the leg and lower third of the thigh. A little below the knee joint anteriorly there was an incision containing a large drainage tube from which pus could be expressed. A skiagram showed marked involvement of the upper end of the right tibia and the lower end of the left femur, with slight displacement of the lower epiphysis of the femur.

On September 6th an incision about six inches long was made laterally over the lower third of the left femur. The skin, muscles, and periosteum were reflected. The bone was found to be soft, inflamed, and exuding pus. While incising the soft parts a large subfascial abscess was opened. This abscess extended throughout the lower half of the thigh and deep into the popliteal surface. Several liberal incisions were made into the abscess and tube drainage was instituted. An incision about five inches long was made anteriorly over the upper third of the right tibia. After reflecting the skin and periosteum the bone was found riddled with pus. In addition, a large subfascial abscess extended throughout the upper half of the leg and into the thigh as a subcutaneous abscess. Several liberal incisions were made into this abscess and tube drainage was instituted. Because of the poor condition of the patient, the enormous amount of pus in the abscess and free bleeding, it was thought best to defer any further procedure, and the wounds were dressed in the usual manner.

On September 12th, after removing all drainage tubes, the upper end of the right tibia was exposed and a burr hole was made into the cortex of the shaft just distal to the epiphyseal line. This opening was about three-fourths of an inch wide and was extended downward about three inches. No curetment of the medullary cavity was done. The wound was mopped with tincture of iodine followed by alcohol and was then packed with vaseline gauze. The same pro-



cedure was carried out on the lower end of the left femur. Vaseline gauze strips were used as drains in the several incisions in the subfascial abscess. Voluminous absorbent cotton dressings were applied to both legs and plaster of Paris spica casts were applied. On October 6th the patient was re-admitted to Margaret Wright Hospital. His general condition was much improved. The casts were removed and all packing and gauze drains. The subfascial abscess was healing nicely. The bone wounds were repacked with vaseline gauze and double spica casts were applied. On November 10th he was again admitted to the hospital, much improved. His temperature ranged around 99 to 100. On November 11th the casts were removed. The superficial abscess was well healed. The packs were removed and replaced and double spica casts were applied.

On December 9th he again entered the Margaret Wright Hospital, showing great improvement in spirits and general condition. On the following day the casts were removed. The superficial abscess was healed. The packs were removed and three or four small sequestra were removed from the right tibia. A large sequestrum in the left femur was not removed as there was not sufficient new bone for good support. The wounds were repacked and double spica cases were applied. On February 2, 1930, he returned to the hospital in splendid general condition. On February 3rd the casts and packs were removed. A sequestrum about four inches long and one inch wide was removed from the left femur. The packing was replaced and a double spica cast was applied. On March 17th he was again admitted to the Margaret Wright Hospital. His general condition then was fine, notwithstanding another attack of malarial fever since his last admission. The next day the casts were removed, the packing was taken out, and one small sequestrum was removed from the left femur. The wound in the right leg was practically healed. The wound in the left leg was dressed, but the casts were discontinued.

The total days in the hospital in this case was twenty-four. Five casts were applied at

intervals, the shortest being twenty-four days, the longest forty-three days.

Case 2.—J. H. S., aged 15, was admitted to the University Hospital on September 22, 1929. The mother stated that about a week before the patient had a large boil on the right forearm, which was incised and drained by his physician. About that time he began to complain of severe pain in his right ankle and foot. On one or two occasions he had chilly sensations and his temperature ranged from 100 to 103.

On examining the right ankle I found swelling of the soft structures over the external malleolus. The swelling extended upward for three or four inches; the area was slightly red and exquisitely painful. Any effort to move the foot or ankle caused great pain. Radiographic examination revealed nothing. His temperature was 103.2, pulse 110, and the white blood count showed 18,000 leukocytes. By my advice the boy was operated upon that afternoon. A four-inch incision was made over the lower end of the right fibula. The periosteum was found entirely separated from the lower end of the bone and contained about one ounce of thick, creamy pus. A burr hole was made into the shaft proximal to the epiphysis. The medullary canal contained pus. The opening in the bone was extended upward for about three inches and was about one-half inch wide. No curetting was done. The wound was mopped with tincture of iodine and alcohol and the cavity in both the bone and the soft parts was packed with vaseline gauze. This was covered with a thick dressing of absorbent cotton and a plaster of Paris cast was applied from the toes to the upper part of the thigh.

The patient's general condition improved. His temperature dropped, the white blood count came down to 13,000, and everything seemed to be progressing satisfactorily until the night of September 30th, when he began to complain of pain in the left hip. The pain and tenderness gradually increased and on the morning of October 2nd the white blood count was 16,000. It was then thought advisable to explore the upper end of the left femur. Operation disclosed no

free pus in the soft tissues or under the periosteum, but on making a burr opening into the bone pus was found. The opening was enlarged downward for about three inches and the cavity in both the bone and the soft parts was packed with vaseline gauze. Voluminous dressings of absorbent cotton were placed over this and a plaster of Paris double spica cast was applied. The pathological report on a piece of bone removed at this operation was, "Small section of bone in state of suppurative inflammation." Three blood cultures were negative.

On November 16th the patient was admitted to the Margaret Wright Hospital in good general condition. The casts and packs were removed, the packing replaced, and double plaster of Paris casts were re-applied. On February 4, 1930, he was re-admitted to the Margaret Wright Hospital in splendid general condition. The casts and packing were removed. One small sequestrum was removed from the right fibula, and several small sequestra were removed from the left femur. The packs were replaced and a double plaster of Paris spica was applied. On April 4th the casts were removed at the residence. The packs were removed from the femur. The wound in the tibia was almost completely healed.

The number of days in the hospital in this case was fifteen. The single cast was used for five days, the double spica three, forty-six, eighty, and fifty-eight days.

Dr. H. Winnett Orr, of Lincoln, Neb., who advocates this treatment, stresses the need of early diagnosis, good drainage, and immobilization, and lays down the following rules:

1. Make a fairly large incision over the infected area. Spread apart the skin, muscles, fasciae, and periosteum just far enough to afford access to the diseased area.

2. Make a window into the infected bone large enough so that adequate drainage is provided.

3. Dry the cavity and wipe out with 10 per cent tincture of iodine, followed by 95 per cent alcohol.

4. Pack the entire wound wide open, but not tightly, with a sterile vaseline gauze

pack. Cover this with a dry sterile pad, absorbent cotton, and bandage.

5. Now perform any reasonable forcible manipulation necessary to place the parts in their correct anatomic position for splinting.

6. Apply a plaster of Paris cast so that the parts are thoroughly immobilized in comfortable and correct position.

7. The cast is not to be split nor are windows to be cut until the wound dressing becomes necessary, and wound dressing is not necessary for some weeks. The wound is not to be dressed at all except for rise of temperature or other signs of acute sepsis. As a rule, no dressing is necessary except on account of odor and then not for two to four weeks, or more.

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## FORCEPS OPERATIONS\*

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### *Clinic*

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A. J. KILPATRICK, M.D.

*Augusta*

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When a man gets lost in the woods as I, and doubtless some of you have been, he is at first uneasy, then nervous, then frightened, then frantic, and when he becomes frantic, he is decidedly unsafe. The same reasoning may be applied to a doctor with the obstetric forceps lost in the pelvic cavity. The moment he becomes lost he is unsafe and the mother and babe are likely to suffer as a consequence.

In this very informal clinic this afternoon I wish to make some suggestions as to how to avoid this awful dilemma in which some of us have at some time found ourselves.

It is essential that you know yourself, the obstetric forceps, the foetal skull, the pelvis, and the mechanism of labor. With this knowledge you cannot go far wrong, for you can speedily right yourself and be in a position to do a satisfactory operation.

You have read in textbooks and journals that "the obstetric forceps is the most humane and at the same time most dangerous of instruments". It has been described as a

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\*Informal clinic before the Medical Association of Georgia, Augusta, Ga., May 14, 1930.

"brutal instrument". This is all foolish talk, for it is neither humane, dangerous, nor brutal. It has no qualification of its own, no virtues, no vices. These belong to the operator.

The forceps does, when in the hands of the operator, possess certain powers just as any surgical instrument. The obstetrician uses only two of these, viz., traction and rotation. Any power or force employed other than these is unscientific and highly brutal.

The forceps is intended to be applied to the foetal head along the occipito-mental diameter and no other, with the bi-parietal diameter running through, or approximately through, the fenestra of the blades. When so placed, it will not compress the foetal head nor will it slip. With the handles tightly locked, if the head is normal in size and the forceps of recent standard make, no diameter of the foetal head is decreased or increased. The bi-parietal is three and three-eighths inches, which is the exact distance between the blades. This diameter during normal labor is decreased one-half inch.

When you get back to the homes of your patients or your hospital, there are some things that are essential when you have decided to operate:

First—*Your patient must be placed on a table of the right height.* If the symphysis pubis is just about on a line with your eye when seated for operation you are in the right relationship to the pelvic curve to work with the least force and greatest safety.

Second—*Have the patient cleansed as thoroughly as possible.* I know most babies in Georgia are not delivered through vulvae of this kind, but no self-respecting doctor would operate without the razor and soap.

Third—*The sac must be ruptured and the cervix completely dilated.*

Fourth—*Anesthesia must be profound.* The abolition of all reflex is absolutely essential. When in this condition you will be able to bring about with your hand or fist within the vagina complete paralyzation and dilatation of the entire perineal floor and vulvae. It takes ten to fifteen minutes to make a loose, flabby sac of these parts. The

same can be done under spinal. With this condition of the soft parts the forceps is not pressed upon as it leaves the pelvis and your operation is shorter, easier, and safer.

Fifth—*Sweep your entire hand over the presenting part before applying the first blade (demonstrating).*

Ninety-nine per cent of all head cases enter the pelvis in the right oblique diameter, 66 per cent L O A (left occipito anterior), 33 per cent R O P (right occipito posterior).

Obviously if there was no rotation as a part of the mechanism of labor, all you would have to do in the use of the forceps would be to apply it in the left oblique diameter and the bi-parietal diameter would run through the fenestra of the blades (demonstrating). But, fortunately, and sometimes unfortunately, heads rotate through as an arc of a circle of from 45 to 225 degrees or more (demonstrating).

In all cephalic presentations, whether of vertex or face, when the presenting part is at the fourth pelvic plane or visible, the forceps is applied with the pelvic curve of the instrument looking to the pelvic front (lantern slides).

With complete posterior positions of the occiput (that is, when the occiput has rotated into the hollow of the sacrum), it makes no difference, whether the head is high or low, the use of the forceps is the same as above; that is, its cavity looks to the front (lantern slides).

In the right positions of vertex or face (ROA., ROT., RMA., RMT.) the concavity of the forceps looks to the mother's right (lantern slides).

Left positions (LOA., LOT., LMA., LMT.), forceps looks to the left (lantern slides).

In right posterior position of the occiput (when occiput is directed to the right sacro-iliac joint) the concavity of the forceps looks anteriorly and to the left with the forehead in the cavity of forceps. When under traction, the occiput is rotating to the front the instrument is removed and placed looking to the right with the occiput in the concavity of the instrument (lantern slides).



Just the opposite is true in left posterior positions of the occiput (lantern slides).

Forceps on the aftercoming head (lantern slides).

Unengaged heads and posterior positions of the face cannot be treated with forceps (lantern slides).

Episiotomy to be used in all breech cases (primiparae), complete posterior positions (primiparae), and in fact any case in which complete paralization and dilatation will not suffice (lantern slides).

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### ROENTGENOLOGIC DIAGNOSIS\*

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#### *Clinic*

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L. P. HOLMES, M.D.

*Augusta*

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I would like to open my remarks by stating the limitations of the x-ray rather than the star methods of diagnosis which we have. We frequently have to consult with physicians and surgeons regarding diagnosis and some of the requests we have to deal with are absurd. I had a patient recently sent to me by a physician who requested that I show the size of the ovary. Not long ago I rayed a patient of Doctor Kilpatrick's and found a twin pregnancy and the mother asked me as she went out of the office whether they were male or female. I try to teach my students the limitations of the x-ray the first thing. We have so many requests that are perfectly impossible to grant, although there are numbers of things that we can demonstrate by the x-ray and the fluoroscope. We cannot, however, do everything.

I have a group of interesting cases I would like to show you by means of lantern slides.

Case 1: Master W. G. S., aged 12, was admitted to the University Hospital on March 26, 1928.

The history stated that he had been in poor health for four or five months, with loss of appetite, progressive weakness, nausea after eating, and a marked tendency to sleep. He became progressively worse and on

March 16th while at a party he went to sleep. It was stated that he could not be aroused for two or three hours. Following this the family physician gave frequent laxatives and restricted sweets. There was no improvement and the weakness progressively increased. The patient was quite constipated.

In the history it was found that the boy had pneumonia during childhood, and the mumps, measles, pertussis, and frequent tonsillitis. The tonsils had been removed one year previously.

Physical examination showed a temperature of 97.2 degrees F., pulse 120, respirations 22, blood pressure 90/40. The thorax, abdomen, heart, genitalia, glands, extremities, skin and reflexes were essentially negative.

Blood chemistry revealed a blood sugar of 83. The nonprotein nitrogen was 27.3. The Pirquet test was negative.

On March 26, 1928, the white blood count showed 5,700 leukocytes, 3,710,000 lymphocytes, hemoglobin 75 per cent. The differential count was: polymorphonuclears 83, large lymphocytes 4, small lymphocytes 6, transitionals 4, eosinophiles 1, basophiles 1, mononuclears 1. On March 30, 1928, the white blood count showed 4,450 leukocytes.

The boy was treated on March 30, April 20, and June 1, 1928.

Case 2: Baby girl Oliver. Time of birth 5:15 a.m., ninth month, weight 6 pounds 11 ounces; temperature 98 degrees F. The measurements were normal. There were symptoms of cyanosis and the child almost died.

*X-ray Report:* Heart displaced to right lateral thoracic wall by what appears to be the entire small bowel occupying the left thoracic area.

*Impression:* Congenital diaphragmatic hernia, with what appears to be the stomach gas bubble and descending colon below the diaphragm. Six days later this impression was confirmed by a barium meal, the coils of the small bowel filling promptly after the baby had nursed two ounces of barium milk.

*Operative Note — Thoracotomy:* There was an opening in the left lateral wall of

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\*Informal clinic before the Medical Association of Georgia, Augusta, Ga., May 14, 1930.

the diaphragm at its junction with the parietes which admitted three fingers. Almost the entire small intestine passed through the opening into the thorax. The skin was prepared with benzine and Harrington's solution. Under regional anesthesia the eighth, ninth, and tenth intercostal nerves were blocked, with a field block surrounding the ninth rib. Incision was made over the ninth rib, the periosteum was elevated and a portion of the rib was removed. At intervals the respiration of the infant became much embarrassed. The thoracic cavity was explored through this opening, but at this point the breathing ceased and it was necessary to resort to artificial respiration. These efforts were fruitless and after half an hour the patient died.

*Case 3:* Mrs. S. M. Y. was admitted to the University Hospital on March 14, 1927, with a diagnosis of pregnancy pain. She was a primipara, seven months.

Upon examination no head could be palpated through the abdominal wall. The muscles were very tight and it was impossible to be certain about the position, but a breech was suspected, and the attending physician sent the patient for x-ray examination. No heart sounds could be made out.

The first stage of labor was very long and painful. The uterus would not relax between pains. A large amount of fluid was expelled when the membranes were ruptured.

In the second stage, under ether anesthesia, the child was extracted by hand. In the third stage there was a very slight amount of hemorrhage, no lacerations, membranes and cord normal. The general condition of the patient was good on leaving the table.

*X-ray Report:* Foetus,  $6\frac{1}{2}$  to 7 months, showing an exencephalus. The extremities appear to be normally developed.

The Wassermann reaction on the foetus was negative.

*Case 4:* Mr. H. B. was admitted to the University Hospital on June 24, 1927, on the service of Drs. Hull and Lee for cystoscopic examination.

The record stated that the cystoscope passed easily; no obstruction in ureters. There

was a generalized cystitis, more marked in the region of the trigone. The right ureteral orifice was normal, but a papillary growth was seen around the left ureteral orifice, with pus and blood exuding from the region of this orifice.

P. S. P. appearance: Right, three minutes; left, five minutes.

Capacity: Right, 12 c.c.; left, 18 c.c.

*X-ray Reports:* May 22, 1927. K. U.B., right.

No calculus seen in urinary tract. There is malfusion of the laminae of the fourth lumbar vertebra (abortive spina bifida). The right eleventh rib is bifurcated at its distal portion, and the right twelfth rib is only a rudimentary process. Both kidneys appear to be rather high and close to the spine, suggestive of a horseshoe kidney which could be ruled out by pyelographic study.

*June 25, 1927—Double Pyelogram*

Double pyelogram shows both kidneys very close to the spine with their lower calices pointing inward and downward, overlapping the transverse processes of the second lumbar vertebra. Left kidney pelvis rotated and the kidney shadow appears to be continuous by an isthmus across the spine between the lower poles. The ureters are unusually close together.

*Impression:* Horseshoe kidney.

On this date a catheterized specimen of urine from the right kidney showed white blood cells, red blood cells, much debris and many epithelial cells. The urine from the left kidney was loaded with red blood cells and an occasional white blood cell was found. P.S.P. right, 90 per cent; left, 90 per cent.

On June 30, 1927, Mr. B. was admitted to the hospital with a diagnosis of papilloma of the urinary bladder, and received 150 mg. hours of radium therapy from Doctor Bernard for Doctor Hull.

*Case 5:* P. S., female, white, aged 18, single, was admitted to Barrett 2 Free Surgical Ward on January 30, 1930, complaining of severe upper right abdominal pain, fever, nausea, and vomiting. She stated that she had enjoyed excellent health until four days previously, when she noted some cramp-like pain just under the costal border on the

right side. The pains became more severe and were accompanied several hours later by nausea, followed by vomiting. Some magnesium sulphate was administered but was vomited immediately. The following day she had a chill that lasted for about five minutes, followed by high fever; pain (cramp-like in nature) continued with varying degrees of severity. The day before admission she had another chill, followed by fever. A physician was called who advised an enema and an icecap to the abdomen and suggested that she enter the hospital. During this time she had had no desire for food and was afraid to drink water lest it provoke vomiting.

Physical examination revealed a well-developed well-nourished but dehydrated female. Her facial expression was dull and listless. Her temperature was 104 degrees F., pulse 130, respirations 30.

The examination revealed nothing abnormal except a rather firm mass about the size of a grapefruit in the upper right quadrant, which was exquisitely tender and fixed.

The white blood count was 16,000; urinalysis was negative.

She was given immediately 750 c.c. of normal saline solution subcutaneously, 400 c.c. of 10 per cent glucose intravenously, tap water by Murphy drip constantly, with an ice cap to the upper abdomen constantly, and water in small amounts by mouth. Twelve hours later she felt considerably better, the mass in the abdomen had diminished about half but considerable tenderness was still present. She was again given 750 c.c. of normal saline solution subcutaneously. Her temperature at this time was 100.5 degrees F., pulse 110, respirations 24.

The white blood count was 14,000; urinalysis was negative.

Twelve hours later her temperature had dropped to normal, pulse 110, respirations 24. The white blood count was 12,000. The mass was decreasing in size and the tenderness was not so marked. The patient felt much better. Some liquid nourishment was permitted and water was forced.

The mass disappeared completely in twelve days. The patient was allowed a regular

diet and permitted to walk around the ward, at this time having no remnant of her former trouble. Cystoscopic examination at this time was negative. The urine from each kidney was negative and the P.S.P. from each side was normal. The patient was dismissed at the end of twenty-one days, with instructions to return should symptoms recur.

*X-ray Reports:* January 31, 1930. K.U.B. Considerable gas over entire abdominal area. A barium enema was advised.

February 6, 1930: Barium enema. The barium fills a normal rectal ampulla, sigmoid and descending colon and distal transverse colon. At the proximal transverse colon there is a definite delay of progress upward and a poor filling in the area of the hepatic flexure and ascending colon. This region appears pushed down and mesially by pathology in the right upper quadrant. Possible perinephritic abscess. Film confirms screen. Left kidney appears normal shape, size, and position. Right kidney not visualized.

February 12, 1930: Pyelogram, 10 c.c. sodium iodid. Right pyelogram shows no definite pathology. The kidney appears to be pushed upward and slightly mesial.

February 14, 1930: Gastrointestinal series. At 9:30 the twelve-hour colon shows head of column in the mid-transverse colon area and the tail in the cecum. The cecum is very large and the upper ascending colon is narrowed down (adhesions pericolic or spasm). The hepatic flexure area appears pushed mesially as seen under barium enema.

The thirty-six-hour colon shows head of column in ampulla, the tail in the cecum. The appendix is filled running retroceally upward along the outer side of the ascending colon, to the area where the extrinsic pressure to the colon was seen.

*Impression:* Probably a retrocecal appendiceal abscess.

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The United States Department of Agriculture reports tests made by Ralph Hoagland and George G. Snider of the department, which show that beef liver, pork liver, and beef kidney contain five to eight times more growing factors for animals than lean beef, pork, or lamb. The experiments involved the feeding of young albino rats which were kept in separate cages and weighed regularly.



## DERMATOLOGIC CLINIC\*

G. T. BERNARD, M.D.  
Augusta

*Recklinghausen's Disease*

I would hesitate to present this patient to a body of dermatologists, for it would not be of particular interest to them, but to those who do not see many skin cases it should be interesting. It is a case of Recklinghausen's disease. This disease consists of many or only one fibrous tumor in the skin. There may be many hundreds of the tumors which grow from fibrous tissue sheaths of the cutaneous nerves. They are soft, jelly, or dough-like growths, but lack the pain which occurs in neuromas. The disease commonly starts in early life and progresses. The etiology is unknown, but it occurs chiefly in individuals who are retarded or in poor health.

In this case (presenting patient) the disease appeared at the age of 19. She is now thirty-nine and the mother of five children. She is not well. She has frequent headaches and has a heart lesion. She was operated upon for an inguinal hernia on one side about two years ago and for one on the opposite side a few weeks ago.

She has many hundreds of the tumors, as you can see, and they are most numerous on the back. The disease is comparatively rare.

*Scleroderma*

This case is, I think, a real treat to any group of medical men. It is a case of scleroderma, or hide-bound skin. We are indebted for this case to Doctor Revell, who found it in his practice and he will present the salient features to you.

DR. S. T. R. REVELL: This little girl is nine years of age and I saw her first in May, 1929. The physical findings were negative. The blood chemistry showed 13 mgs. sugar, and she had a slight leukopenia when I first saw her.

The reason I became interested in the child was that her father told me that her skin was getting hard. This interested me at once. Scleroderma is a chronic disease of

the skin characterized by a hardening and immobility of the parts affected. It is divided into three groups, the diffuse symmetrical, the limited or circumscribed, and the mixed type. The diffuse type is most commonly seen in the upper extremities, the face and particularly about the shoulder girdle. The circumscribed type is seen in the lower extremities and the mixed type is seen anywhere. It is characterized by whitish flakes, and a typical feature is a brawny, hard feeling of the skin as the disease develops. At first the skin is red, but this fades off into the normal skin in such a way that the line of demarcation is not distinct. The etiology is not understood. Often there is a history of the patient getting wet. It is associated with the rheumatic conditions.

The pathology is a hardening of the connective tissue bands, with hardening of the tissues of the skin.

In this little girl, as you can readily determine on palpation, all about the shoulder girdle there is a definite area of hardness that extends down below her elbows. Her face is a little harder than normal. The areas cannot be seen well, but can be easily detected by palpation and I will have her pass among you for examination.

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BLACKTONGUE PREVENTIVE  
VALUE OF LARD, SALT PORK,  
DRIED GREEN PEAS, AND  
CANNED HADDOCK

For several years the Public Health Service has been conducting studies relating to nutritional diseases with particular reference to pellagra. A report recently made public indicates that the blacktongue preventive potency of lard, salt pork, dried green peas, and canned haddock has been studied. The results show that lard and salt pork are poor sources of the blacktongue preventive. Canned haddock contains the blacktongue preventive factor and, when used in relatively large proportion, the clinical manifestations of blacktongue are prevented. Dried green peas contain the blacktongue preventive, but in relatively small amount. Fifty per cent or more of the test animals on the lard, salt pork, and haddock diets showed post-mortem evidence of fatty degeneration of the liver.

—United States Public Health Service.

\*Informal clinic before the Medical Association of Georgia, Augusta, Ga., May 14, 1930.

BLOOD CHEMISTRY AND INTERNAL  
MEDICINE\**Its Aid in Diagnosis, Prognosis, and  
Treatment*

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During the early practice of medicine, the laboratory was an unknown quantity, except in a very primitive way. Of the several excretions from the body, the urine probably attracted the most attention. The examination of this fluid was limited to observing the quantity,<sup>1</sup> color,<sup>2</sup> transparency, odor, and taste. The latter test probably gave the most information. Willis<sup>3</sup> in 1674 first recognized the distinction between Diabetes Mellitus and Insipidus by the taste of the urine. These examinations, although very crude, led observers to believe that the urine contained many constituents of value to clinical medicine. Dobson<sup>4</sup> in 1776 demonstrated the presence of sugar in the urine, and Fehling<sup>5</sup> in 1848 devised a method that would detect abnormal quantities. This was soon followed by methods of quantitative determination by himself and others.<sup>6,7</sup> Valhard<sup>8,11</sup> in 1874 became interested in the salts, and devised a method for the estimation of the Chlorides.

The next in order were the nitrogens, comprising the total nonprotein-nitrogen, urea nitrogen, creatinin, uric acid, ammonia, and phosphates. Weyel<sup>11</sup> and Jaffee<sup>12,16</sup> became interested in creatinin and published their work in 1878 and 1886, respectively. Kjeldahl<sup>16</sup> in 1883 worked out a method for estimating the nonprotein-nitrogen which is still in use. This was followed by a group of workers<sup>10,23</sup> with methods for the detection and determination of the other constituents mentioned. It was learned from the chemical analysis of urine that in certain diseases of metabolism, the nitrogenous waste products from the foods were not eliminated in normal quantities. This suggested the possibility of analyzing the blood for these

constituents, which were apparently held back in this tissue. The technic was based on the chemistry of the urine. The evolution of blood chemistry and its appliance to clinical investigation furnishes a means of going behind the screen, as it were, to obtain more valuable information than could be had from analysis of the urine. The former has almost replaced the latter at the present time. The reader's attention will revert from the nitrogens to the sugar in the blood for the time being.

It is interesting to note that Claude Bernard<sup>23</sup> in the year 1849 demonstrated the presence of sugar in the normal blood. This was just one year after Fehling began his work on urine. No advancement was made along this line until 1891 when M. Abeles<sup>24</sup> worked out a method of blood sugar determination, and other workers did likewise. Bang<sup>25</sup> in 1906 devised a technic which is now in use with modifications. The quantity of blood necessary for these older techniques ranged from five to twenty-five cubic centimeters, which was a distinct disadvantage. Lewis and Benedict<sup>26</sup> in 1913 devised a picric acid method which was very simple and required only two cubic centimeters of blood. This was a remarkable advancement over the older, more cumbersome methods. Myers and Bailly<sup>27</sup> modified the latter technic in 1916 and Benedict<sup>28</sup> himself modified the method in 1918, thus adding to its efficiency. Before (1912) and during this time, Folin and Denis<sup>29,32</sup> were developing methods for the determination of the nitrogens in the blood. In 1919 Folin and Wu<sup>33</sup> published their work, bringing forth an entirely new method of precipitation of the blood and a technic for analyzing the filtrate not only for sugar, but for the total nonprotein-nitrogen, urea, creatinin and uric acid. The studies presented here were made with the Folin-Wu method, except the uric acid determinations, which were made with the Benedict method.

This paper is limited to a study of the nonprotein-nitrogen, urea nitrogen, creatinin, uric acid and sugar, which are the usual constituents analyzed from the blood of the average individual examined. There are oth-

\*Read before the Medical Association of Georgia, Augusta, Ga., May 14, 1930.

Table No. I—Normal Blood Chemistry Values

Non-Protein Nitrogen .....	25-30	Mgs. per 100 cc. of Blood
Urea Nitrogen .....	12-15	Mgs. per 100 cc. of Blood
Creatinin .....	1-2	Mgs. per 100 cc. of Blood
Uric Acid .....	2-4	Mgs. per 100 cc. of Blood
Sugar .....	80-120	Mgs. per 100 cc. of Blood

Table No. II—Ten Miscellaneous Cases; Blood Chemistry Expressed in Milligrams per 100 cc. of Blood

Case	Age	B.P.	N.P.N.	Urea	Creat.	Uric Ac.	Sug.	Diag.	Prog.
1	22	110-75	24	17.5	1.5	4.5	100	Exam.	
2	45	108-59	24	13.6	1.5	3.4	---	Arthritis	Fav.
3	59	165-100	28	13	1.5	2.8	---	Depressed	Fav.
4	56	122-60	28.5	13	1.5	---	---	Exam.	
5	55	136-65	30	14.6	1.5	---	100	Exam.	
6	30	145-65	30	14	1.5	---	129	Exam.	
7	---	---	23	13	1.7	3.3	---	Exam.	
8	---	---	30	16.6	1.6	---	---	Exam.	
9	53	145-85	25	15	1.4	5.6	105	Exam.	
10	62	105-45	63	---	1.8	---	---	Pus Kidney	Bad
		9-11-24	33.3	---	1.4	---	---	Pus Kidney	Bad
		9-4 -25	34.6	21.4	1.8	---	---	Pus Kidney	Bad

Table No. III—Ten Cases of Essential Hypertension; Blood Chemistry Expressed in Milligrams per 100 cc. of Blood

Case	Age	B.P.	N.P.N.	Urea	Creat.	Uric Ac.	Sug.	Diag.	Prog.
1	59	275-165	27	23	1.5	4.1	148	Hypertension	Bad
2	56	240-150	28.5	15	1.8	6.6	---	Hypertension	Bad
3	56	160-100	28.5	15	1.6	4.5	---	Hypertension	Fav.
4	44	240-120	30	15	1.5	---	---	Hypertension	Guarded
5	51	185-120	26	13.9	1.5	5	---	Hypertension	Fav.
6	27	160-110	31.5	15	1.5	4	---	Hypertension	Guarded
7	52	185-110	28.5	14.2	1.5	6.6	100	Hypertension	Guarded
8	46	260-156	31.5	14.1	1.5	---	---	Hypertension	Guarded
9	60	155-110	27.2	16.6	1.5	---	---	Arteriosclerosis	Fav.
		3-Mon	33.3	16.1	1.5	4.6	---		
10	67	208-100	34.2	16.6	1.6	---	---	Hypertension	Fav.

ers that are equally as important in selected cases; eg., the chlorides phosphates, calcium, cholesterol, etc., but it is not possible to cover the entire field at this time. The nitrogen containing substances of the blood may conveniently be divided into two classes, the proteins (albumen and globulin) which are essential and permanent, and the nonprotein-nitrogen substances (total nonprotein-nitrogen, urea, creatinin and uric acid) whose transportation is one of the chief functions of the blood. It is therefore the nonprotein-nitrogen group that concerns the clinician. The latter consists of partly transformed foodstuffs and waste products of metabolism, which unless utilized by the tissues, circulate until excreted by the kidneys. In health and disease, the concentration of the nitroge-

nous substances in the blood, is the result of three variable factors, the intake of nitrogenous food, activity of metabolism, and the excretory ability of the kidneys. Normally the concentration is kept at a fairly constant level (Table 1), with a slight rise for only a short period following meals. When the kidneys are damaged, and their capacity to excrete thereby lessened, these substances tend to accumulate in the blood, and the term "nitrogen retention" is applied. In early, mild, kidney lesions, there is little or no nitrogen retention, but in acute, moderately advanced, and advanced kidney lesions, all degrees of nitrogen retention will be found (Tables 4-5). There is no laboratory procedure that will give more dependable information and aid in diagnosis, prognosis,



Table No. IV—Twelve Cases of Interstitial Nephritis; Blood Chemistry Expressed in Milligrams per 100 cc. of Blood

Case	Age	B.P.	N.P.N.	Urea	Creat.	Uric Ac.	Sug.	Diag.	Prog.
1	63	230-150	60	---	2.5	---	---	Nephritis	Died Uremia
2	65	210-145	120	85.5	3.1	---	---	Nephritis	Died Uremia
3	51	225-138	33.3	---	---	---	200	Neph. & Diab.	Bad
		One Mon	54.5	42.8	2.1	---	166.6		
4	57	220-180	85.7	50	3	6	---	Nephritis	Bad
5	58	260-150	36.3	27.2	2.7	5.4	---	Nephritis	Bad
6	64	235-115	150	---	3.7	---	---	Nephritis	Bad
7	76	180-90	200	---	5	---	---	Nephritis	Died Uremia
8	---	---	60	54.5	3	---	---	Nephritis	Bad
9	41	240-160	100	75	2.3	---	---	Nephritis	Bad
10	61	265-170	68	30	2.3	---	162	Neph. & Diab.	App. &
		One Mon	60	42.8	2.3	---	172.7	Uremia Diab., Coma	
11	52	230-140	109	60	2	---	---	Nephritis	Bad
		3 Wks.	120	75	2.7	---	---	Nephritis	Bad
12	46	275-160	60	42.8	2	---	---	Nephritis	Bad
		One Wk.	66.6	75	2.3	---	---	Nephritis	Bad

Table No. V—Mr. A. M. J., Age 65 Years  
Obs. 7-16-26 to 8-5-26. B.P. 150-70 to 200-90

Blood Chem.	N.P.N.	Urea	Creat.	Uric Acid	Sugar
6-14-26	31	13	1.3	3.7	117.7 Mgs.
7-20-26	109	100	3.7	6	161.6 Mgs.
7-22-26	75	54.5	3.7	7	---
7-28-26	92.3	120	7	7.2	117.6 Mgs.
7-30-26	150	100	7.5	5	125 Mgs.
8-4 -26	210	100	12	15	142 Mgs.
Diagnosis—Acute Exacerbation of a Chronic Interstitial Nephritis.					
Death—8-5-26, Uremia.					

and treatment than the chemical analysis of the blood. It is also very useful in differentiating kidney diseases from other conditions manifesting similar symptoms.

#### Diagnosis

Blood chemistry is based on such sound principles, and is so reliable in careful hands, that it should constitute one of the most valuable of all laboratory tests, in making proper diagnoses. It is indicated in all metabolic disturbances, especially kidney diseases, when albumen, casts and sugar are found in the urine, an altered kidney function test, high blood pressure, convulsion, coma, gout, oedema, ascites, general anasarca, pancreatitis, and a selected group of individuals who complain of dizziness, weakness, and nervousness coming on at stated intervals. The latter is symptomatic of a hypoglycemic syncope, and much attention is being paid to that condition. Some diag-

nostic clinics and hospitals have adopted a routine blood chemistry on all patients examined, comprising total nonprotein-nitrogen, urea, creatinin, uric acid and sugar. When such a routine is followed much valuable information is obtained where least expected. However, if nothing abnormal is found in the chemical analysis it is very gratifying to the clinician and the patient.

Blood chemistry has no equal as a differential diagnostic laboratory aid, as illustrated in Tables II, III, and IV. It is the surest means of differentiating Diabetes Mellitus from Renal Glycosuria. It is necessary at times to do repeated blood sugar or a glucose tolerance test, to classify these conditions; particularly is this true when a transient glycosuria is found as is often the case during life insurance examinations.

There is another group of cases which is so often seen for the first time in extremis,

with symptoms of cardiac failure and renal insufficiency (oedema, ascites, general anasarca), an abnormal blood pressure, albumen, and casts in the urine. Here the question to decide is whether the condition is primarily cardiac with secondary renal derangement as a result of passive congestion, or primarily renal with secondary cardiac failure. In the former state there is little or no nitrogen retention, while in the latter the opposite is the case. The creatinin value should especially be noted.

### Prognosis

There is no procedure that will give a surer prognosis in a given case of interstitial nephritis and many other conditions than one or more chemical examinations of the blood. It is generally believed that a non-protein-nitrogen of 100 and urea nitrogen of 60 mgs. per 100 cc. of blood, uremic coma is inevitable. In actual practice there are some variations from this rule. Cases have been observed with figures much higher than these, and the individuals were fairly rational. In nephritis, uric acid is the first constituent of the blood to be retained, urea nitrogen second, and creatinin third and last. In normal, mild, and moderately severe nitrogen retention, the urea nitrogen is one-half the nonprotein-nitrogen value. When the condition is more advanced and the urea nitrogen exceeds this figure, the prognosis is proportionately grave. The creatinin is the surest one on which to base a definite prognosis. A creatinin value of 3 or more mgs. per 100 cc. of blood, with nonprotein-nitrogen and urea nitrogen in proportion, means a fatal termination in a very short period of time. When the latter is persistently elevated to 3 gms. with the non-protein and urea nitrogen only slightly elevated (which is often seen) a safe prognosis is one to six months.

Individuals with diabetes mellitus may have very high blood sugar values with a favorable prognosis, but where nephritis occurs with the diabetes, the prognosis is very grave.

### Treatment

In treating metabolic disturbances under discussion, the diet holds first place, in con-

junction with other measures. The value of frequent blood sugar determination in the treatment of diabetes mellitus is so well established that very little need be said. The time interval at which analyses should be made depends upon the severity of the condition. While regulating the diet and dosage of insulin (if the latter be given) every three to seven days is desirable, but after this is regulated, every two weeks or once a month is all that is necessary. If complications such as erysipelas or other infections should occur, it is very desirable and often necessary to make blood sugar estimations every four to six hours. This also applies when a diabetic undergoes an operation. This is safe and feasible with the micro methods now in use.<sup>31, 32</sup>

In nitrogen retention, chemical analysis of the blood would aid materially in regulating the protein diet, and the elimination, but it is not done as frequently as it should be. Many practitioners deem it of no further use after a diagnosis and prognosis have been established. In the last group of cases mentioned under Diagnosis, the treatment *depends almost entirely* on the blood chemistry findings.

### Summary and Conclusion

1—A brief history of the development of the chemical analysis of the urine, which preceded the chemical analysis of the blood, is given.

2—The evolution of blood chemistry and its application to internal medicine is touched upon.

3—Short discussion of how blood chemistry is helpful in diagnosis, prognosis, and treatment of metabolic diseases concludes the paper.

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#### DISCUSSION ON PAPER OF DR. BYRD

*Dr. J. E. Paullin*, Atlanta, Ga.—Doctor Byrd's paper is a delightful resume of our knowledge concerning the normal and abnormal appearance of certain substances in the blood stream during the progress of disease. Our bio-chemists have added wonderfully to our knowledge of disease by their careful and painstaking observations and have offered rational explanations for various clinical conditions that were difficult to understand and interpret. Among these might be mentioned the spectacular increase in our knowledge concerning sugar metabolism; its storage, utilization and excretion, which has resulted from the employment of bio-chemical methods in studying blood sugar curves and respiratory quotients. It is possible now to easily differentiate certain benign types of glycosuria from those associated with marked disorders of metabolism. One the harmless renal glycosuria, the other severe diabetes mellitus. The value of blood chemical studies in helping to differentiate various comatose or toxic states, as pointed out by Doctor Byrd, cannot be minimized. So that on the whole these procedures are of a great deal of value in helping to add to our knowledge of various clinical states. Yet one must not reach that point where absolute reliance is placed on procedures such as these to the neglect of a careful clinical consideration of the patient. The condition of the patient as determined by a careful history, a careful physical examination, and the correlation of good sound clinical judgment stands first in importance and is of more value than anything else; this we must depend on for our final diagnosis, making use of other aids and helps as obtainable from other specialized examinations.

After one becomes familiar with clinical states associated with abnormal blood constituents, one can frequently predict the occurrence of high values for sugar, non-protein nitrogen, creatinine and urea in the blood with a fair degree of accuracy, just as with the electrocardiograph after one studies and becomes

familiar with the various types of cardiac irregularities these can be recognized clinically without, as a rule, the use of an electrocardiogram, although one would not for a moment minimize the great progress in our knowledge of heart disease as a result of the employment of this instrument of precision.

There is therefore a limited field of usefulness for the various laboratory procedures; they are of great value when taken into consideration with the clinical condition of the patient and, after all, when it comes to offering a diagnosis or prognosis as to the outcome in a given disease there has, as yet, nothing been discovered which supplants or equals careful clinical judgment and experience.

*Dr. C. H. Richardson, Jr.*, Macon, Ga.—I wish to say a word about the value of blood chemistry estimations to the man doing surgery. A few years ago at the Macon Hospital we felt this was a good time to judge the value of routine blood chemistry estimations in assisting the patients who were being prepared for major operative procedures, and we subjected all patients of this type to this plan. The knowledge gained was somewhat surprising and by taking advantage of the estimations and adapting the anesthetic we were going to use to those findings, and by building up our patients by blood transfusions and other measures we were able to materially reduce our mortality for a number of years.

I think the man doing surgery is negligent in part of his duty if he fails to give his patients the advantage of these blood chemistry estimations.

*Dr. T. L. Byrd*, Atlanta, Ga. (closing)—I wish to thank the gentlemen for their discussion. My paper was in no means intended to belittle clinical observation. If we take the clinical and laboratory findings and correlate them we have something very valuable in the diagnosis, prognosis, and treatment of our cases.

#### AGRANULOCYTOSIS

In the case of agranulocytosis reported by Stewart R. Roberts and Roy R. Kracke, Atlanta, Ga., (*Journal A. M. A.*, Sept. 13, 1930), blood counts were made throughout its course, including a second attack. There was complete disappearance of the granulocytes from the blood stream two days before the clinical onset and their reduction to only 10 per cent four days before the clinical onset. The marrow before the clinical onset had ceased the manufacture of the granulocytes. The marrow evidently passes through a period of dysfunction to complete afuction in a case presenting total absence of the polymorphonuclears. But the primary lesion, the primary dysfunction, the primary afuction is in the myelocytic division of the marrow even before the clinical onset. The disease exists in the bone marrow before it appears in the blood stream and in the blood stream before it appears clinically. The disease has, therefore, three onsets: a marrow onset, a blood stream onset and a clinical onset.



## THE PREVENTION OF GONORRHOEA

### *A Further Report on Sealing Solutions in the Anterior Urethra as a Prophylactic Measure and as a Method of Treat- ment for Beginning Gonorrhoea*

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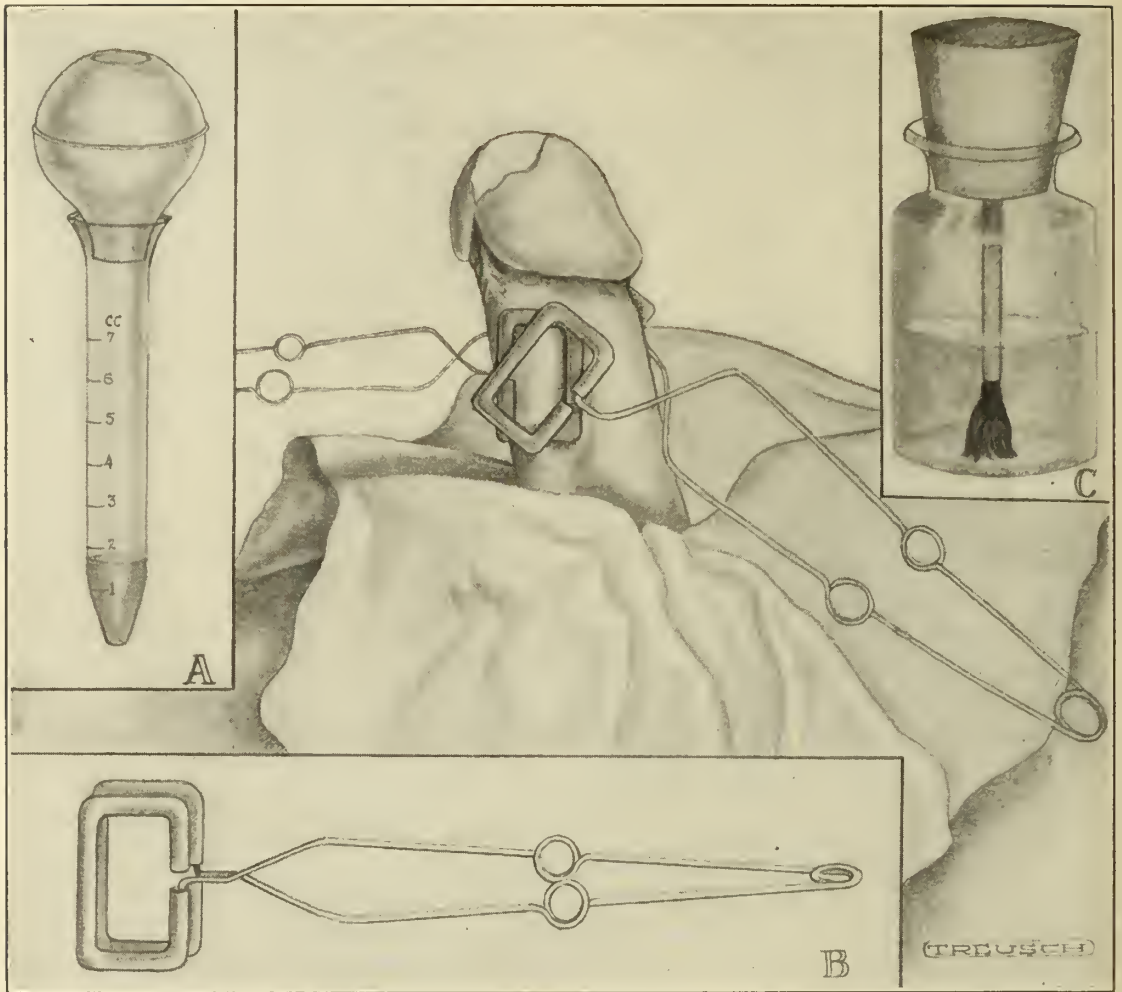
About twenty-three years ago one of us described the technic of sealing germicidal solutions in the urethra as prophylactic treatment against gonorrhoea and as a curative measure for beginning urethritis. Since that time the measure, with various modifications, has been employed by us in thousands of patients, and we still use it as a routine in early urethral infections. While it has definite limitations as a therapeutic measure, it has at times, when properly employed, equally definite advantages.

*Prophylaxis.*—As a prophylactic method, the sealing treatment is far superior to any method known to us, because it is almost certainly effective if used within forty-eight hours after exposure. Unless given within at least six hours after coitus, prophylactic treatments as ordinarily administered cannot be relied upon. Not infrequently a patient reports twenty-four to forty-eight hours after exposure and says that he has been informed that the woman with whom he had intercourse has infected others. For such individuals, sealing a germicidal solution in the anterior urethra, where it is allowed to remain for three to five hours, affords nearly perfect results. Except for one failure in twenty-three years, we could say that, when employed within forty-eight hours after exposure, this method has given perfect results as a prophylactic measure.

One treatment, as a rule, is all that is required; when, however, there is a positive history of gonorrhoea in the woman and the time elapsing has been more than twenty-four hours, one sealing treatment a day for two days has been advised.

*Anterior Urethritis.*—When employed soon after the appearance of urethral discharge, a certain percentage of acute gonorrhoeal infections are cured by sealing solutions in the anterior urethra once a day for five days. It is not possible to determine in advance what will be the outcome in a given patient, regardless of how favorable the prospects seem. Many times when every factor appears to be favorable, a prompt cure is not obtained by this method. Among the factors which seem to increase the likelihood of failure are: (a) incubation period longer than usual; (b) coitus during the incubation period; (c) long motor trip during incubation period; (d) meatus swollen and edematous; (e) repeated coitus or under the influence of alcohol at the time of exposure; (f) urethral treatment such as injections, irrigations, and the use of sounds during the incubation period or immediately before beginning the sealing treatment.

*Technic of Sealing Solutions in the Anterior Urethra.*—The patient empties his bladder and reclines. The meatus and glans penis are cleansed and dried. Not more than 25 minims of solution is injected; more is likely to cause the sealing to break. When injected into the urethra, the penis is clamped with two test tube holders, as shown in the illustration. The meatus is dried and collodion is applied with a camels hair brush. The collodion is applied directly to the meatus and over the glans penis immediately around it. No cotton is used. The clamps are allowed to hold the penis upright until the collodion is dry. A condom with a pledget of cotton in it is rolled on the penis to protect the patient's clothing in case the collodion should leak. Another piece of cotton is placed under the upper part of the condom to keep it from slipping off the penis. The patient is instructed to avoid any straining effort or pressure from his clothing that might be likely to break the seal. He is also advised to take liquids sparingly until after the seal is removed. At the end of four or five hours the patient breaks the collodion, allows the solution to escape, removes any fragments of collodion from the glans penis, and then urinates. He should drink water



Clamps retaining solution in anterior urethra and holding the penis upright while the collodion dries. The clamps are ordinary test tube holders with rubber tubing slipped over the holding part. Inserts show syringe, clamp, and collodion bottle

freely for the rest of the day, but only a limited amount of water during the hours immediately preceding the next treatment. The treatments are repeated once a day; if administered oftener, the meatus becomes irritated and the treatment may have to be discontinued before the cure is effected.

When satisfactory progress is being made, the discharge promptly decreases and the urine becomes clear or shows only a little cloudiness and a few shreds in the first glass. *If the meatus becomes swollen, the discharge with gonococci persists or increases and the urine remains or becomes cloudy, the sealings are at once discontinued and the usual routine measures instituted.*

**Failures.**—For various reasons failure to accomplish a prompt cure often follows the employment of this treatment. Sometimes

causes of failure are obvious, sometimes they may be guessed at, and sometimes, or rather many times, the reasons for the failure remain altogether unknown. Infections in the glands of Littre not reached by the germicidal solution is probably the most frequent cause of failure. Failure is certain when the infection has already extended more deeply than the part subjected to the solution.

Altogether we would say there are many disappointments with this plan of treatment; nevertheless, the successes are so worth while that, in our hands at least, it still remains the method of choice for incipient anterior gonorrhoeal urethritis.

Many of our colleagues have employed, or attempted to employ, this plan of treatment and, in the majority of instances, with-

out success. Failure has been due, at times, to their inability to make the collodion hold the solution in the urethra. This has usually been due to the use of too much of the solution, to the quality of the collodion employed and failure to dry the meatus properly before applying the collodion. Other failures have been due to *delay* in starting the sealing. Still others fail because they administer two treatments a day instead of one. Many have insisted upon placing a pledget of cotton over the meatus; the solution will nearly always run along the cotton fibres and cause the seal to leak. Others complain that their patients rarely report early enough to permit this plan of treatment. We probably succeed oftener than some of our colleagues because many patients have been trained to come at the earliest possible moment after the discharge appears.

Of all the factors concerning the treatment, nothing is so important as an *early start*; unless the patient reports promptly it is preferable not to attempt this treatment.

In order to perfect their technic, some have employed the treatment when it was obviously too late to hope for success. It is far better to use it in long standing, chronic cases until the knack of sealing the urethra is acquired.

*Medication Employed.*—Many remedies have been used with varying degrees of success. Two requirements are necessary for satisfactory results: (1) the preparation employed should be non-irritating or very slightly so; (2) it should have adequate germicidal value. Penetration would appear to be a desirable quality, but the agents which appear to penetrate, such as dyes, have not been as satisfactory as silver salts.

Argyrol is the best silver salt to use for sealing in the urethra. It has a good germicidal action, but it is slightly more irritating than lunasol or neosilvol. Five per cent strength is usually employed.

*Collodion.*—The success of sealing the meatus depends to a considerable extent upon the collodion used. It should be plain U. S. P. Collodion, not the flexile; it should be of medium thickness. The collodion which

turns white while drying never holds satisfactorily.

*The Result of the Treatment.*—No matter how slight the discharge nor how clear the urine may be, the patient should not be declared well until five days have elapsed without treatment. Sometimes the cure seems perfect, yet the discharge, with gonococci, will reappear, usually within two or three days. We have not seen a recurrence after the patient has seemed well for as long as five days.

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## ELECTRIC COAGULATION OF THE LATERAL TONSILS

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*Atlanta*

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Many years ago I tried destruction of tonsillar tissue by electric currents from the voltaic pile or from direct current dynamos and I was successful in a few of them. In others there were burning and secondary hemorrhage and so the procedure was abandoned.

Local anaesthetics of various kinds came into use to avoid the risk of the general anaesthesia and they are fairly successful today, but they entail much soreness and some hemorrhage and enough risk so that they should be done at the hospital.

Various attempts to remove tonsils electrically included the hot snare which is poor surgery for many reasons, one of which is secondary bleeding. Always there has been the desire to avoid bleeding and shock. Bleeding always predicates blood inhalations and secondary pneumonias as well as exhaustion from loss of blood.

Several electric devices have been on the market, but until recently all that I have seen have failed to give a continuous and accurate control of a proper current for the coagulation of gland tissue. Fischèr & Co. have constructed such a machine. It is now possible to set a machine at a desired voltage with an indicated frequency of oscillation of an alternating current that can be measured in milliamperes and then to be sure that the current will be delivered steadily and reliably



whenever turned on for use. This current will coagulate glandular tissue.

Experiments show that in kidneys secured at the meat market, definite things will follow definite electrical conditions.

Operations on the human tonsil show clearly that when the properly adjusted current is sent through the living tonsil from a large electrode attached to the body to a small, sharp point held against the tonsil, the tonsil will be coagulated to a depth and degree controlled by the time of the application and the number of applications made.

The coagulation is a small spot immediately surrounding the contact point and others are made confluent with each other by moving the point from time to time, interrupting the current at each move. The time is less than two seconds for each contact. The coagulation can be seen; the touched tissue turns white. There is no sparking and only a sensation of slight warmth. It is further seen that this coagulated material is sterile and does not bleed. It is not painful and there are no bad odors or bad taste. In the course of a week or ten days this coagulated material will flake off without the patient knowing it. If then any tonsil remains, it can be touched again and the process repeated until the fossae are entirely clear. When this happens the fascia is not exposed and there is practically no scar remaining.

The technique is simple. First, the machine is carefully set. Then in the doctor's office, the patient is made comfortable and reassured as to the harmlessness of the machine. The tonsils are touched a few times with a solution of butyn 2 per cent to avoid the slight pain of contact with the sharp aluminum needle that forms the throat electrode. The large electrode is easily adjusted to the back and can be slipped down under the clothing without disrobing. When the butyn has dulled sensation in less than fifteen minutes, the contacts are made and the current controlled by a foot switch so that the point can be adjusted before any current is admitted. There is no shock. Each touching is preceded by a breaking of the current

so that there is no risk of other contacts. The patient may spit or drink or rest between contacts as he pleases. He has a towel in his hand and pus basin to spit in, but is not otherwise covered. Nothing more is needed. There is no bleeding. The patient may drink at any time if he likes. The contact is never more than two seconds each. As already said, the current sterilizes what it touches. I have operated upon ulcerated tonsils that I should not have dared to touch by the other surgical means. The contact was made into each ulcer and the coagulation occurring around it killed the infection as the subsequent condition proved. A patient called me up five hours later to say that he was very much better and that all the pain had left his throat. The ulcers were destroyed and the tissue around them.

The current does coagulate gland tissue. It will burn mucous membrane and muscular tissue if held against them long enough. But this injury will heal. It is painful and must be avoided. There is practically no pain in the gland coagulation.

The procedure is applicable to any patient who will sit reasonably still. The ages of my cases range from nine to sixty-four years. In children their fear of novel things makes them restless and it is not advisable to try to force them to be quiet. Two nine-year-old children have been quiet enough to have the work done and they got along nicely. One was a secondary operation to remove old pieces and the other was a child with so bad a heart that all anaesthesia was dangerous. I removed the lateral tonsils in two sittings and then gave a little gas and wiped out the adenoid. It was all done at my office and the child was not disturbed at any time so that she could not go home readily and safely. In children generally, the method is not so good as the other surgery for the reason of the adenoid and because the child usually will not quietly submit. In the older cases, one was done at my office without trouble and the other was an ulcerated tonsil that was treated at the patient's home. Home cases are not convenient, for the machine is heavy and one must be

sure of the alternating current and of a steady supply. But in this case she was dangerously ill and needed a relief that the cutting operation could not safely supply.

Some of my patients have been employed and they have come to my office at the noon hour for their treatments. Thus they have lost no time and they have eaten a light lunch as well. They have returned to their offices for the afternoons.

There are some things to be avoided in the work. One must not attempt to do too much at any one sitting. There will be distress for the patient if too much contact is made. One must be careful to touch nothing but tonsillar tissue. One must reassure the patient against fear of burning or other electric terrors. One must convince his patient that it is not an x-ray. One must never be in a hurry; the patient will hasten matters if given time to adjust himself whenever he wants to do so. As soon as he finds he may do quite as he pleases, can spit, can rinse his mouth, or can breathe a while he will co-operate speedily.

The advantages are: Removal of the tonsils at the office and thus save hospital expense. No general anaesthesia. So little local anaesthesia as not to be noted by the patient. No hemorrhage. No loss of time. Very little or no interference with meals and so no nutritional disturbance. And finally no increase in fee over that of the usual method. It means a great saving to the patient in every way and it means the complete removal of the tonsils without exposing the fascia and without leaving scars.

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#### CULTIVATION OF BRUCELLA FROM STOOLS AND BILE

Harold L. Amoss and Mary A. Poston, Baltimore (*Journal A. M. A.*, August 16, 1930), have isolated *Brucella* seventy-eight times from the stools of six patients. They found that the use of liver agar as the basis for the eosin-methylene blue plates offers no improvement over meat extract agar. *Brucella* has been obtained in cultures from the bile procured by duodenal drainage and from the contents of the gall-bladder at operation in a case of chronic *Brucella* infection. They point out that the causative organisms may not always be present in the stools of acute cases of *Brucella* infection.

#### ABDOMINAL PAIN\*

##### Case Reports

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Rather than a lengthy treatise on etiology, pathology, and treatment, I prefer the presentation of a brief review of a few cases as a means of opening the discussion of rather uncommon abdominal symptoms.

1.—A negro man, 30 years old, was first seen on the seventh day of illness, with a tense, tympanic abdomen. He had had no bowel movement for seven days. There was fecal vomiting. Pain was not severe and prostration was not marked. A mid-line incision was made, the intestine presenting was opened and drained through Jacob's glass tube. Search revealed a small knuckle of gut in right abdominal ring. Hot towels restored it to normal; the gut was replaced and the abdomen closed. He received a daily gastric lavage and nutrient enemata, but there was no bowel movement for seven days after operation. On the seventh day two ounces of castor oil in the morning and two ounces of Epsom Salts in the evening were left in the stomach after lavage. On the eighth day, having gotten no results, four ounces of oil and four ounces of salts were used. Bowels moved freely fifteen days after last natural bowel movement. The gastric lavage was stopped and enemata given. As the patient improved, the bowels became regular, and recovery was uneventful. In due time we did a herniotomy, from which he made an uneventful recovery. In this case, as in the following, the history was simply that the bowels had stopped and that the usual methods would not relieve. The pain was general over the entire abdomen.

2.—A 43-year-old white man was first seen with the abdomen symmetrically distended, with pain, not severe, over entire abdomen and with a history of no bowel movement for two days, although they had been regular before that. He had taken "salts" and enemata of his own accord. There was a history of a previously incarcerated right inguinal hernia. Palpation revealed general but no localized tenderness. Fearing an obstruction, I made a mid-line incision. Free, purulent fluid appeared on opening the peritoneum, and the intestines were distended, congested and "grainy" in appearance. In the right iliac fossa was a large gangrenous appendix firmly adherent, with two fecoliths free in the abdominal cavity. I suspected that he might have a knuckle of gut, as in the first case reported, although he had a high leucocyte count. With some difficulty the appendix was removed, drains used, and the wound partially closed. The patient

\*Read before the Seventh District Medical Society, Cartersville, Ga., April 2, 1930.



died five days later: a case of general or diffuse peritonitic (with death due to paralytic ileus and infection). With a history of having had his hernia incarcerated on several occasions, without severe pain but with a high white count, the count would indicate infection. However, the generalized pain, no marked point of tenderness, and apparent obstruction lead to the mid-line incision to make a search easier. But in this instance it made the removal of the appendix more difficult.

3.—A 26-year-old white man suffered severe sudden pain in the epigastrium, over the gallbladder. His physician gave him several doses of morphine by hypodermic before he could be relieved, and he stated that the patient became very cyanotic, the pulse very slow and almost impalpable. I saw him about six hours after the initial pain and at that time he was fairly comfortable, color was good, pulse much better and, although under the influence of the opiate, he was able to fairly well describe the pain. There was extreme tenderness over the entire abdomen—in fact so much so that it was impossible to make a diagnosis. Later the pain localized over the appendix, as did the tenderness, and a leukocyte count was 25,240. An interesting feature was that the temperature never went over 98.4, the pulse not over 80, nor the respiration over 22 until after operation, when they never went beyond 99.8, 90, and 24. The patient had a bronchitis at the time of the attack, but the lungs showed nothing to account for a sudden severe pain. On account of the unusual manifestations during the attack, i.e., the slow weak pulse, cyanosis, etc., we believed it better to remove the appendix under local anesthesia. No pain or difficulty were experienced until just as I attempted to bring up the appendix, when the patient was seized with a violent coughing spell, although he had had morphine and atropine before operation. This coughing necessitated a delay and it became necessary to use a general anesthetic in order to proceed. Weighing the dangers of chloroform, because of the previous cyanosis and heart action, we chose ether, even though he had the cough. As soon as enough ether was administered, the patient "went bad"—artificial respiration and stimulants were used. The cyanosis cleared up, respiration was resumed, and as rapidly as possible I removed the appendix and closed the peritoneum without drainage as the appendix, though purulent, was not ruptured. He made an uneventful recovery and left the hospital in eleven days. This case, while not unusual as to the onset of appendicitis, was interesting as regards the effect of drugs as well as pain and may cause us to pause to consider the portal circulation. Probably the greater pain in the hepatic region was because of the circulatory drainage from an infected appendix.

4.—A white man 28 years old was first seen in the country at 6 a.m. He stated that he had suffered all night with severe pain, which commenced in the left shoulder, his wife using hot packs in an effort

to relieve it. Later the pain became severe in the left axilla, then down the left chest, then over the whole abdomen. He stated that about two months before, and about one year before, he had had "a small pain" right over the right anterior superior spine of the ilium, but with no other symptoms. On examination his temperature was 98, pulse 74, respiration 20. He had had no nausea or vomiting, except that he had vomited a dose of oil his wife gave him early in the morning. He was not apparently in severe pain, his expression was good, yet the entire abdomen had an extremely board-like rigidity, so much so that effective palpation was without result. The leukocyte count was 18,840, with 88 per cent polynuclear cells, and two hours later was 20,280, polys 80. I am indebted to Dr. W. P. Harbin, of Rome, Ga., whom I called in consultation, for his valuable advice and assistance. I made a right rectus incision, removed a purulent appendix, found no other pathology and closed the abdomen without drainage. For about thirty-six hours after operation the extreme rigidity and pain were present, but after that he became comfortable, abdomen softened, and he made an uneventful recovery. Dr. Irving Gray, of Brooklyn, N. Y., reports in the December (1925) number of the *American Journal of Medical Sciences* (p. 894) three cases of "Left Shoulder Pain of Phrenic Origin—a Reflex Symptom of Chronic Appendicitis." This was the first and only case that I had ever seen.

5.—A 39-year-old white man was taken with severe, sudden cramps, especially in the epigastrium. He had a chill, nausea, and vomited blood. He had the appearance of a man rapidly nearing his end—extremely pale, even to cyanosis of lips and fingers, with cold, clammy sweat, shortness of breath, pulse 50 and very weak, temperature 97, respiration 20, blood pressure 90/50, and almost complete suppression of urine. The lungs were negative; heart negative as to adventitious sounds, though slow and weak. The tongue was heavily coated and there were sordes on the teeth. The urine was alkaline; Sp. Gr. 1.022, muddy red color, 4 plus indican. It contained some red blood cells, few pus cells and bacteria, but was otherwise negative. There was tenderness on percussion over the liver and spleen, though neither was palpable. Five years before, this man had had "biliary colic", but without the profound symptoms now displayed. Examination of the blood for malaria showed it loaded with quartan gametes. Intravenous quinine dihydrochloride and quinine by mouth in acid solution, with attention to kidneys and other symptoms brought relief and he was able to leave the hospital in ten days, very much improved. This man had the typical algid, hematuric form of malaria, rarely seen in this section, yet not uncommon in some sections of the country. I later got a 4 plus Wassermann, gave him antisiphilic treatment, and he has improved in every way, gained weight, and looks well indeed. Sudden, severe pain, especially when accompanied by a chill, may well call for attention to



other parts than the abdomen itself, as in this case the blood picture made the diagnosis. It is possible also that the luetic infection aggravated the abdominal pain.

6.—A 24-year-old negro stuck the ends of his right index and middle fingers on dirty glass in taking paper out of a bale at paper mill. Infection followed. Eleven days after injury his fingers were swollen and purulent and were opened and drained, under general anesthetic. He left the hospital in three days, improved. About a week following the operation he complained of some pain in the left side, at the lower edge of the ribs and in the left flank. This was about eighteen or twenty days after injury. Simple remedies relieved but did not stop the pain, which gradually grew worse, and about seven weeks after injury the pain was rather severe, with a chill and a slight fever. Examination of blood for malaria was negative, yet I gave him quinine, which only helped reduce the fever. Four days after the first chill he had a rise of fever to  $104\frac{4}{5}$ , with chill, pulse 110, respiration 24. There were tenderness, with rigidity of the left abdominal muscles, dullness over lower lobe of left lung. The heart was negative, except for rapid pulse. The lungs were negative and there was no cough at any time. I made a diagnosis of "abscess of the spleen", and my partner "pyothorax". We aspirated the left chest and found pus. Under local anesthetic I did a partial rib resection, removing about two inches of the rib and evacuated about a pint of thick pus. Drainage tubes were inserted and patient returned to bed. The fever and pulse rate promptly came down, but after a few days began to rise again, with "pain in his heart" (his expression). Six days after first operation I reopened, under local, the first wound, and in feeling for some probable pockets I may have missed at first, I brought up a small portion of omentum (which was washed in normal saline and returned). This man evidently had a splenic abscess which ruptured through the diaphragm into the left pleura, and which accounted for the pain in the left abdomen as well as at the costal border. Recovery was uneventful and he is now, after nearly five years, strong and robust, having returned to work in about two months, and has worked ever since.

7.—A 63-year-old white railroad executive, first seen at 2 p.m. Others with him stated that he had been feeling in excellent health and had attended to his usual duties that day, when suddenly as he sat down to lunch he was seized with a violent, excruciating pain in the left iliac region, extending through to the sacro-iliac joint, with severe shock, ashen gray appearance, cold, clammy sweat, and marked prostration. Pulse was 60, blood pressure 150/80, temperature subnormal, respiration about 22. I gave him morphine Gr.  $\frac{1}{4}$ , atropine Gr.  $\frac{1}{150}$ , with Gr.  $\frac{1}{100}$  digitalin. In a short time he vomited some food, probably his breakfast, though this did not clear his stomach. He was given two glasses of warm water, which he vomited, yet his stomach was not

clean. At the end of an hour he still complained of severe pain in the lower left abdomen and the left sacro-iliac synchondrosis, changing from one to the other. His bowels had moved a little that morning from a small dose of saline. At the end of the hour the pulse was 72, soft and slightly irregular. Then a second dose of morphine and atropine was given. At the end of the second hour the pulse was 80, and still irregular, and the pain was not so intense. At 5 p.m. (three hours after the attack) the pain demanded another  $\frac{1}{4}$  Gr. of morphine and  $\frac{1}{150}$  Gr. of atropine and  $\frac{1}{100}$  Gr. of digitalin. Following this, nausea again set in, with vomiting and fainting. Following the third hypodermic he went to sleep, arousing at times with some pain, returning to sleep again. By 10 p.m. he was fairly easy, looked well, had a good color, and was rather cheerful, although the heart action was irregular and about 90. At no time did he have any rigidity of the abdominal muscles, no tenderness, no burning sensation or pain in bladder or penis nor down the thigh. This patient lived in Savannah, and arrived there the next morning "apparently in good condition and quite cheerful" (quoted from Dr. Barrow's letter). However, "Before leaving the car he was actively nauseated, lost his color, sweated, and his pulse rate ran about 120, intermittent and with alternating force. He had some return of pain in the upper left abdomen".

At one time during the first afternoon he said he had a little discomfort over the transverse colon. "After entrance into the hospital, eighteen hours after the initial attack, the first blood pressure was 100/65. At 10:30 a.m., about three hours later, the blood pressure was 80/nil. Three ounces of urine were obtained at 9 a.m., which, he stated, was the total amount passed since noon the day before."

Urinalysis: straw, acid, 1010, 4 plus albumin, no sugar. Blood: R.B.C. 3,160,000, W.B.C. 13,800, Hb. 80 per cent, Polys, 93 per cent, N.P.N. 38/7, mgm. 100 c.c. blood, Urea (Nitrogen) 27.3 mg. per 100 c.c. blood. Temperature:  $99\frac{1}{2}$  to  $100\frac{1}{2}$ . During this same morning he had pronounced cardiac fibrillation with pronounced visible pulsation in epigastrium. Cardiogram showed extra systoles. This condition under medication cleared up entirely by 7 p.m., and his blood pressure returned to 115/75. (He told me his blood pressure had been about 170 systolic.) In thirty-six hours he passed a total of 25 ounces of urine. At 2:30 a.m. (thirty-six hours after first attack) he voided 8 ounces (of the 25 ounces), and stated that he felt much better. At 2:50 a.m. he informed the nurse that he had an inclination for his bowels to move. As she entered the bathroom to get a bed pan he died without struggle or outward complaint. It was the chief surgeon's opinion that he died of coronary block, auricular fibrillation with excessive urea retention."

This patient told me that years ago he had been treated for "indigestion" with pain in the epigastrium. While he did not call it a pain, still he mentioned

a "discomfort over the transverse colon." While many of the symptoms evidenced by this patient are those of coronary block, still the rather unusual feature seems to be the abdominal pain, low down, with no rigidity or tenderness.

Perhaps I have misnamed this paper or report of cases; yet I have endeavored to bring out points in these histories that were of interest, in that there were some unusual features, whether as to pain in the abdomen from causes outside, or of conditions in the abdomen where the pain was more marked elsewhere.

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### FIBROMYOMA OF THE UTERUS COMPLICATING PREGNANCY. AND LABOR\*

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#### *Case Report*

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O. R. THOMPSON, M.D.  
Macon

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Fibromyomata of the uterus are of interest to the surgeon and the physician assuming the responsibility entrusted to him by the pregnant woman. These tumors have caused sterility, produced abortions and premature labors, and have caused serious complications during pregnancy, labor, and the puerperium. The co-existence of pregnancy and uterine fibromyoma is most often found between the ages of twenty-five and forty-five years. Fibromyomata are more prevalent among the colored race than the white race, due to the predisposition of the uterus of colored women to undergo fibroid degeneration.

Sterility may be caused by the fibroid obstructing the cervix or the uterine cavity, or by altering the glandular or vascular structure of the endometrium. Myomectomies have been performed to relieve sterility caused by fibromyomata. The results obtained as found in a review of the literature make the operation one that deserves serious consideration.

Pedunculated and intramural tumors have been removed without interruption of the pregnancy, the patient delivering spontaneously at term. During pregnancy fibromyo-

mata increase in size, become softened, and change in position as the uterus enlarges. When fixed by impaction or adhesions, abortion usually occurs between the third and fourth month, although pregnancy may continue to term and cause the patient no more discomfort than is often experienced during the course of a normal pregnancy. Grave symptoms during pregnancy are caused by a fibromyoma when it degenerates, becomes infected, or has its circulation partially or completely interrupted by torsion. Small interstitial tumors, located in the upper part of the body or fundus of the uterus, may produce no symptoms during pregnancy nor serious difficulties during labor. Large tumors of the posterior uterine wall, lying free in the pelvis, may recede or be pushed out of the pelvis during labor, permitting normal delivery.

Tumors which deform the uterus greatly increase the incidence of abnormal presentation and position of the fetus. Those located in the lower uterine segment displace the cervix and offer serious delay to its dilatation and obstruction to the passage. When there is such obstruction, delivery by version or forceps may injure the child, rupture the uterus, or bruise the tumor. The damaged tumor may then undergo degeneration or become infected and gangrenous. Labor complicated by a fibroid impacted in the pelvis should be recognized early and requires abdominal section followed by myomectomy or supravaginal hysterectomy.

Submucous fibroids may so alter the endometrium as to cause placenta previa or low implantation of the placenta. Low implantation not infrequently leads to hemorrhage from partial separation of the placenta. Severe postpartum hemorrhage may occur when the placenta has been attached over a tumor. Retention of the placenta and membranes after the delivery of the child may result from adhesions to a fibroid or from obstruction of the birth canal by a tumor.

Fibromyomata located in the body or fundus of the uterus may alter the uterine musculature, causing inertia during labor and seriously interfering with involution during the puerperium. Those located in the lower

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\*Read before the Sixth District Medical Society, Indian Springs, Ga., June 26, 1930.



uterine segment may alter the uterine canal, preventing drainage and rendering the patient more susceptible to infection. Should infection occur, the tumor often becomes involved and develops gangrene, necessitating hysterectomy.

Fortunately, tumors obstructing labor are rare, and those cases presenting the interesting features found in the following case report merit a careful study:

#### CASE REPORT

3850—Mary S., colored female, primigravida, age 33, was admitted to the Macon Hospital on November 10, 1929, complaining of term pregnancy, in labor and unable to deliver.

Present Illness: Last menstruation February 4, 1929; estimated date of confinement November 11, 1929. She was admitted to the hospital in June and treated for threatened abortion. During her stay in the hospital, which lasted five days, her blood was found positive for the Wassermann reaction and was given antiluetic treatment. She also received mercury and salvarsan in the clinic after leaving the hospital. During the afternoon of November 7th, labor pains began and she called her midwife. Labor continued without termination until November 10th, during which time the midwife made several vaginal examinations. The midwife became convinced that the patient could not deliver herself and sent her to the hospital. The membranes ruptured twenty-four hours before admission.

History: Negative except for dysmenorrhea. Married one year and was pregnant for the first time.

Family History: Both mother and father living and well. Husband in good health.

Physical Examination: Patient very apprehensive and begging for relief; blood pressure 120/60, pulse 110, respiration 22, temperature 99.4. Head, chest, and heart essentially negative. Abdomen contained term pregnant uterus. Contractions present at three-minute intervals and lasted 30-40 seconds. Pains very weak. Uterus rotated to the right and the general contour was not unlike that found in the presence of Bandl's contraction ring. Palpation revealed that the fetal head was high above the pelvic inlet and was held out of the pelvis by some obstruction or disproportion. Several hard areas could be easily palpated in the fundus while the uterus was relaxed. Fetal heart rate of 150 could be best heard to the right of the umbilicus. Vaginal: Marital outlet, orifice small and tight. Cervix found high and immediately posterior to the symphysis. The external os admitted only the tip of the examining finger. Posterior part of the pelvis was completely filled by a hard mass which extended upward, filling the pelvic inlet. Fetal head could be palpated above the pelvic mass by the external hand. The amniotic fluid had drained off twenty-four hours before admission.

Clinical Laboratory Report: Blood Wassermann reaction positive at the time of her previous hos-

pitalization. Urinalysis: Dark amber in color, acid reaction, sp. gr. 1020, albumen 1 plus, few pus cells and an occasional blood cell.

Preoperative Diagnosis: Fibromyoma complicating labor. One large tumor obstructing the birth canal.

Preoperative Preparation: Before a vaginal examination was made the patient was carefully prepared and one ounce of 4 per cent mercurochrome was instilled in the vagina. Before the operation a second instillation of mercurochrome was made in the vagina, and the patient received 1,000 c.c. of normal saline by hypodermoclysis.

Operation: Classic cesarean section. Followed by a supra-vaginal hysterectomy. Operation was done under nitrous oxide-oxygen and light ether anesthesia. Abdomen opened by midline incision below the umbilicus. Several hard fibrous areas were found in the fundus and the body of the uterus. Uterus opened by longitudinal incision in the body and fundus. A living male infant delivered by breech extraction; 1 c.c. of pituitrin was injected in the fundus to force the uterus into firm contraction. One large tumor the size of a small grapefruit was found attached to the posterior wall of the uterus and extending into and filling the cul-de-sac. The tumor, held in the pelvis by adhesions, was easily lifted out of its bed. Uterus was removed by supravaginal amputation. Both tubes and ovaries, apparently normal, were left in. Cervical stump was closed with interrupted catgut sutures.

Gross examination of the uterus showed it to be a normal organ at full term except for several typical fibromata. The largest of these was attached to the posterior wall by a short pedicle. Cut sections of the uterine walls and fibromyomata showed nothing unusual.

Course: Patient was discharged on the twentieth day following the operation. A second Wassermann test was done after the operation and again found to be positive. She was given intensive antiluetic treatment and referred to the clinic for treatment after discharge. The baby was taking the breast and gaining in weight at the time of discharge. Patient returned to the clinic four months later for follow-up examination, complaining of weakness, nervousness, headache, and no appetite. She had not been to the clinic for further antiluetic treatment. Examination showed marked keloid formation along the line of the abdominal incision. There was some tenderness found in the pelvis on bimanual examination. She reported that her baby died on December 25th with convulsions.

The interesting features found in the above case are:

1.—In spite of the extensive fibromyomatus degeneration of the uterus, the patient was able to become pregnant the first year after marriage.

2.—The threatened abortion that occurred during the fourth month was prevented by palliative measures. The presence of the luetic infection cannot be disregarded as a possible cause of the threatened abortion.

3.—The institution of intensive antiluetic treatment



enabled the patient to carry her pregnancy to term and be delivered of a living baby.

4.—The obstructing tumor was adherent and did not recede out of the pelvis during pregnancy or labor.

5.—Cesarean section followed by supravaginal hysterectomy was not only necessary in this case, but is the method of choice in dealing with the definitely infected cases that cannot be delivered through the natural passage.

6.—The baby probably died of congenital syphilis. For the baby to escape contracting syphilis from the mother, intensive treatment must be given before the third month and continued throughout the period of gestation.

### THE IMPORTANCE OF USING FRESH FRUITS AND VEGETABLES IN THE ROUTINE DIET OF YOUNG CHILDREN\*

M. M. MCCORD, M.D.  
*Rome*

All infants should begin taking some kind of fresh fruit and vegetables by the eighth month. The omission of these very essential foods from the diet of children until late in the second year of life is possibly one of the greatest errors which mothers make at this time.

It has been a custom of ages for the average mother to use what judgment she has in the feeding of the baby, and then call in some other mother of the community, who has had a number of babies of her own, for advice as to the proper feeding the child should have. As a rule, such a practice is very dangerous to the infant, for the reason that the average mother has given very little attention or study as to the balanced diet of her own child, to say nothing of advising others. She knows little of the body requirements, but if her children have weathered the storm of life and passed out of babyhood and are still living, she feels that her advice for young mothers is worth following.

The writer of this paper has rendered service in many cases in which the diet was strictly one-sided. Possibly the same baby would like a balanced diet better, but because the infant likes meat it must have meat three times a day without any resort to milk,

cereals, fruits, and vegetables. The physician is often told by the mother that the baby does not like milk, will not eat cereals, vegetables, etc., except possibly a raw apple, but when the facts in the case are learned it is clearly shown that said infant has never had an opportunity to cultivate a taste for any of these things. If the mother likes meat and bread better than anything else she trains her baby to eat only meat and bread.

It is very unfortunate that such a condition exists, yet many medical men are to blame for this. If the mother states to her doctor that the infant will not eat cereals, vegetables, cooked fruits, etc., the average physician accepts that as final, and tells her to give the baby something it wants. It has been trained to take two foods, and as far as the child knows, these embrace the whole diet of a baby. A little candid advice of the attending physician, with a reasonable patience from the mother, the infant can soon be trained to take any food it should have.

Vegetables and fresh fruits contain carbohydrates, a small amount of proteins, fats, water, salts, vitamin, and bulk. These food elements are daily needs of the baby. Milk, eggs, and meat are also very necessary to their diet and should not be neglected. However, fruits and vegetables are very essential in that they furnish the gastro-intestinal tract and the entire body with elements needed for structure, for repair, and for maintaining the proper equilibrium. It would be just as reasonable to attempt to build a house without nails or a chimney without lime and cement as to endeavor to build a well-balanced human body with only a portion of the foods necessary for a well-developed structure.

Possibly the best vegetables to begin feeding about the eighth month are spinach, carrots, asparagus, and fresh tomato juice. These foods may be given at first as vegetable broths, and later as whole vegetables forced through a sieve. Orange juice may be given about the fourth month, prune juice from the sixth to the eighth month, and baked apple about the tenth month, alternated with apple sauce and stewed apricots. Any new foods should be started in very

\*Read before the Seventh District Medical Society, Cartersville, Ga., April 2, 1930.

small quantities and gradually increased as the child's digestive organs develop. As the child grows older, having handled these vegetables and fruits satisfactorily, other vegetables such as squash, celery soup, potatoes, beans, peas, egg plant, boiled okra, tomatoes, etc., may be added. All vegetables to babies should be given at the third feeding of the day, which ordinarily should be about 2 p.m.

Babies can be trained to take any vegetable or fruit, but, as stated above, it takes patience and persistence on the part of the physician and the mother. All new foods, such as vegetables, should be given at the first of the feeding period, while its hunger is keenest, and afterwards the child will take a sufficient quantity of the food it already likes. In other words, never fill a baby's stomach with food it has been trained to take and then expect it to take and like food which it knows nothing about. Most infants will take what they want any time, but must be given all new foods while their hunger is most acute.

In my judgment of quite a few years in the infant feeding line much of the trouble in feeding fresh vegetables and fruits to babies is due to the fact that many mothers find it practically impossible to secure these foods except for a few months out of each year. Then, too, the average mother feeds her baby vegetables which have been prepared for adult members of the family, which in most cases are too highly seasoned. A child should never be allowed to eat vegetables prepared for the family until he or she is at least two years of age, and then the vegetables should be mashed and mild in flavor. So often vegetables are overcooked and in other cases not cooked enough.

There are various canned vegetables on sale, which many mothers use during the seasons when fresh vegetables are unavailable, yet most of these are prepared for healthy adults, and are too highly seasoned for an infant. Several months ago I received a case of assorted canned vegetables from Harold Clapp, Inc., Rochester, N. Y. The lot consisted of canned vegetable baby soup (strained and unstrained), tomatoes, peas, carrots,

spinach, beans, apple sauce, stewed apricots, etc. That which impressed me most about these vegetables was the fact that they were canned in glass containers, and therefore plainly visible. I found that they were seasoned properly for an infant. I tried some of the vegetables and fruits on some of the babies in my practice and found that they liked them from the very beginning. I have not found a case where the above-mentioned canned vegetables have disagreed with a single infant.

I asked one of the local drug stores to order an assortment of these canned vegetables, and am prescribing them in cases where it is impossible for mothers to get and prepare fresh green vegetables. As I understand it, the producers of Clapp's product of canned vegetables sell only through drug stores. I like that idea very much, for a mother may call at her grocery store for canned vegetables for her baby and it will often happen that the store will not have the quality desired in stock, but will send something else as a substitute. The mother accepts the opinion of her grocer and finds to her sorrow that the canned vegetables are not intended for infants, but are for healthy adults. When these foods are sold only through drug stores I feel that the doctors can keep a closer check on the quality, and also the manufacturer will necessarily see that all precautions are taken in offering to the medical profession a product of the highest quality, that it may serve the purpose for which it is intended.

It is very important that every physician should make out a feeding schedule when treating a baby. This schedule should show how much of the various foods the baby is to have, and the hours for feeding. Most mothers will follow a typewritten formula, and it is well worth the time of each physician to prepare one. If the doctor doubts that the mother is able to secure and prepare fresh vegetables and fruits he should place reliable canned ones on the schedule, which have been especially prepared for children. This will solve a great problem for mothers, and also make it possible for babies to have a well-balanced diet at all times.

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## BRONCHOSCOPY

Some nineteen hundred years ago the Apostle Paul noted that the Athenians spent their time in nothing else but either to hear or tell some new thing. The physician of the twentieth century is curiously like the old Athenians in his interests.

None of the new things in medicine is more dramatic than bronchoscopy. In the last century a German began the investigation of the bronchi by direct vision. He did this through an opening into the trachea, but his procedure never became popular. About twenty-five years ago Chevalier Jackson began to examine the bronchi by means of an instrument passed through the mouth. True to the traditions of his profession, he made no secret of his methods, and this pioneer now has disciples all over the world. Georgia is fortunate in having several of them.

In the early stages of bronchoscopy, its value lay almost exclusively in the removal of foreign bodies from the lungs. During the last decade, however, its use has been extended into the field of early diagnosis of obscure chest conditions. It is obviously better to see what is going on and to be able to take material direct from the lung for culture or biopsy, than to rely entirely upon indirect methods. And it is possible through a bronchoscope to aspirate pus from deep cavities, and to apply medication exactly where needed. Now a patient can go to a hospital for bronchoscopic treatment under local anesthesia twice a week, and go on about his business within an hour. It is a far cry from the days of tracheotomy to the present. Foreign bodies have already become of secondary importance in bronchoscopy; that is to say, although it would be impos-

sible to exaggerate the value of prompt removal of such objects from the lung through the bronchoscope, opportunities for other types of work are far more common.

The elementary law in physics that for every action there is an equal reaction has its counterpart in the practice of medicine. For every new advantage offered the modern physician in diagnosis and treatment, he must shoulder an additional responsibility. The practitioner must bear in mind that the child sick with pneumonia may have aspirated a peanut, and his adult patient with a chronic productive cough may be suffering, not from tuberculosis, but from bronchiectasis or lung abscess.

The lay press has been more than generous to Doctor Jackson. The Atlanta papers still

*The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.*

seem to regard a blood transfusion as a spectacular event of great news value. Certainly whenever they hear of one they do not lose the opportunity of telling it to the world. They will have a lovely time when they get wind of the bronchoscopic work that is being done in Georgia today. Bronchoscopic examination is no more painful or dangerous than cystoscopic examination.

Esophagoscopy is rather less frequently necessary. Most ingested things pass harmlessly into the stomach and beyond, but an open safety-pin in the esophagus or fishbone caught in its mucosa must be promptly removed. Peptic ulcer of the esophagus, stricture and cardiospasm, benign papilloma and carcinoma are among the esophageal lesions that can be diagnosed promptly and accurately only by means of the esophagoscope.

L. M. B.



## THE NURSE THE DOCTOR WANTS

The ideal nurse for the present-day physician is one who has good breeding and an attractive personality, skill in giving general care and making patients comfortable, who can observe and report symptoms well, takes care to follow medical orders and is adept at handling people.

This picture of the perfect nurse was ascertained from questionnaires sent to doctors in many branches of medicine, by the Committee on the Grading of Nursing Schools, which is conducting a five-year study of nursing and its problems. The above qualifications were the five most stressed by the more than 4,000 physicians from all parts of the country who answered the queries.

Just how the various requirements for a good nurse rank in the minds of the physicians as a whole may be seen from the following:

- 65 per cent want the nurse to have skill in general care
- 65 per cent want the nurse to have skill in making the patient comfortable
- 45 per cent want the nurse to have skill in observing and reporting symptoms
- 43 per cent want the nurse to have care in following medical orders
- 34 per cent want the nurse to have good breeding and attractive personality
- 30 per cent want the nurse to have skill in handling people
- 28 per cent want the nurse to have skill in asepsis
- 27 per cent want the nurse to have familiarity with hospital routine
- 22 per cent want the nurse to have experience and background
- 21 per cent want the nurse to have familiarity with their personal methods
- 15 per cent want the nurse to have ability to work under a heavy strain
- 15 per cent want the nurse to have familiarity with a particular disease
- 3 per cent want the nurse to be a responsible adult to take charge of the family
- 3 per cent want the nurse to be a mother's helper and houseworker

The modern physician thus places the old-fashioned concept of a nurse as "a pair of hands and feet" at the bottom of the list. His demand now is for a woman of good background, of high professional principles,

with thorough training and experience in the actual care of the patient, as nurse for his cases.

The study shows that the demand for practical nurses by physicians is steadily dropping, with 84 per cent preferring the graduate, registered, trained nurse at all times for their own cases, and an additional 8 per cent preferring them always for certain types of cases.

The general practitioner and the internist are most interested in the ability of the nurse to give general care, 69 per cent and 70 per cent, respectively, registering for this quality, as compared with the average percentage of 65. The neurologist is least interested in it, though more than half of those questioned checked for it.

Skill in observing symptoms is most desired from the nurse by the surgeon, neurologist, obstetrician, and pediatrician. The three last-named groups also had a more than average interest in the qualification of good breeding and personality. The surgeons emphasized skill in asepsis and care in following medical orders as well.

The neurologists are by far the most interested in having for their patients nurses who can handle people, 61 per cent checking this, as compared with an average of 30 per cent.

Nurses who take particular care to follow orders shine brightest in the eyes of the pediatricians, 57 per cent of them desiring this qualification, while the average demand is 43 per cent. The surgeons and the obstetricians are most interested in having nurses familiar with hospital routine and their personal methods.

Nine out of ten physicians reported they are getting the nurses they want and would be glad to take the nurses on their last case back again. The surgeons were the group most satisfied, 63 per cent of them marking their nurses with the highest rating.

Some of the typical comments made by the physicians, that show what they appreciate in nursing care specifically, were:

"A good observer, gentle, thorough. She follows orders explicitly and reports changes promptly." "My nurse has a sense of humor, which helps a lot." "She kept hordes of anxious relatives and friends out of the room." "She has always been cheerful." "She combined a good technical training with common sense." "She carried out orders but modified them when the need was obvious." "She had a proper sense of the dignity of the position." "She is intelligent, observing, not afraid to take a severe case twelve miles in the country." "She was

a good cook and knew how to handle people." "There has been a very distinct improvement in the patient's mental condition during her stay in the hospital."

"Her asepsis was perfect." "She was of great value in preventing a psychosis from developing." "One of the nurses was exceptionally good-natured and tolerant." "Anyone who can feed a patient a half-pound of cooked liver daily for four or five months deserves credit for being a good cook and knowing how to handle people." "She sees to it that even the family are happy."

#### COMMITTEE ON THE GRADING OF NURSING SCHOOLS.

### ESSENTIALS OF A REGISTERED HOSPITAL

*Prepared by the Council on Medical Education and  
Hospitals of the American Medical Association*

In its work with hospitals it is the desire of the Council on Medical Education and Hospitals to co-operate in every way possible for the improvement of hospital service, whereby sick or injured people may be provided with the best possible care. The Council does not claim to have, nor does it assume any legal authority over any hospital, but recognizes clearly that the officers in charge of such institutions have the unquestioned right to conduct the hospitals in any way they deem wise. If a hospital desires to have the Council's endorsement, however—and that is what the Council's approval actually means—it should not be unwilling to comply with the principles which the Council deems necessary for such endorsement. The following "essentials", or principles, have been prepared by the Council with the sole intention and desire of dealing with equal fairness to all institutions. A hospital seeking admission to the Register, therefore, should have the following qualifications:

1. A staff made up of one or more properly qualified physicians who shall be graduates of reputable medical schools; and all physicians treating patients in the hospital must be so qualified.

2. An able management which, depending on the size of the hospital, may be in the hands of a competent physician, an able superintendent, or a board of trustees.

3. A competent physician-pathologist, either on the staff or easily accessible, who should examine and keep a careful record of tissues removed at all operations conducted in the hospital.

4. Careful histories and records of all patients admitted to the hospital with which should be filed reports of any laboratory analyses, roentgen-ray findings or pathologic reports of any tissues examined.

5. One or more competent nurses depending on the average number of its patients.

6. Regular staff conferences, at least monthly and preferably weekly, in all hospitals having staffs of three or more physicians. At these staff conferences complicated cases in the hospital should be considered,

as well as all deaths occurring in the hospital during the period intervening between meetings. If necropsies have been held on any of these patients, these especially should be given discussion in which antemortem and postmortem signs, symptoms and observations should be compared.

7. Hospitals are institutions which should not be conducted for profit, but for the purpose of securing better medical service for the community, and they should always be conducted in accordance with the code of ethics of the American Medical Association.

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Pinson, C. H., Hapeville	Treusch, H. L., Atlanta
Pruitt, M. C., Atlanta	Upchurch, W. A., Atlanta
Quillian, G. W., Atlanta	Upshaw, C. B., Atlanta
Quillian, W. E., Atlanta	Waits, Chas. E., Atlanta
Reed, Clinton, Atlanta	Warren, W. C., Atlanta
Rhodes, C. A., Atlanta	Wells, W. F., Atlanta
Roberts, C. W., Atlanta	Wilkins, C. A., Atlanta
Roberts, S. R., Atlanta	

## SECOND DISTRICT MEDICAL SOCIETY

*Albany, Ga., April 11, 1930*

The meeting was called to order by Dr. H. M. Moore, President, at 2 p.m.

Invocation was delivered by Dr. R. W. White, after which the minutes were read by the Secretary.

Before the scientific program was entered into, the following committees were appointed by the President:

Nominating Committee: Doctors Cook, Summerlin, Rogers, and Wilkinson.

Program Committee: Doctors Rehberg and C. K. Wall.

### *Scientific Program*

The first paper on the program, entitled "The Home Treatment of Tuberculosis", by Dr. J. A. Redfearn, of Albany, was read; at the same time the essayist showed a patient who had been treated in this way. The paper was discussed by Dr. I. W. Irvin, who showed the necessity of checking all chests before doing even local tonsils. Dr. E. F. Wahl emphasized the necessity of co-operation by the patient in order to obtain satisfactory results. Dr. C. K. Sharp stated that in his experience it was difficult to get these patients in the moderately advanced stage. He recommended the use of a twenty-pound bag of shot on the chest. Dr. Lon Grove, of Atlanta, mentioned phrenectomy as a method advocated by many prominent men of today. Doctor Redfearn closed without further comment.

The second paper on the program by Dr. Lon Grove, of Atlanta, was entitled "Obstructive Lesions of the Colon". Doctor Grove in his remarks illustrated these with lantern slides, the lantern being operated by Doctor Collins. Doctor Grove emphasized the necessity of routine proctoscopic examinations in abdominal complaints. Doctor Grove stated that the location of the lesions occurred most frequently in the following order:

(1) Cecum or sigmoid, (2) transverse colon, (3) descending colon, and (4) ascending colon. These may be divided into two types, namely, adenocarcinoma and scirrhus carcinoma. The lesions are usually single and do not metastasize early. Diarrhea is frequently one of the symptoms associated with disturbed bowel function. His series showed forty-five cases under twenty years of age. Also the report indicated that there is more bleeding in cancer than in tuberculosis. The treatment is entirely surgical. There was no discussion.

### 1930 HONOR ROLL\*

#### COUNTY SOCIETIES

1. Randolph County, Dr. G. Y. Moore. Cuthbert, September 5, 1929.
2. Barrow County, Dr. W. L. Mathews, Winder, December 5, 1929.
3. Dougherty County, Dr. I. M. Lucas, Albany, December 28, 1929.
4. Lamar County, Dr. J. M. Rogers, Barnesville, January 6, 1930.
5. Turner County, Dr. J. H. Baxter, Ashburn, February 10, 1930.
6. Monroe County, J. O. Elrod, Forsyth, February 18, 1930.
7. Wayne County, Dr. A. J. Gordon, Jesup, March 20, 1930.
8. Stephens County, Dr. C. L. Ayers, Toccoa, April 2, 1930.
9. Upson County, Dr. R. L. Carter, Thomaston, April 3, 1930.
10. Lowndes County, Dr. Bennett G. Owens, Valdosta, May 5, 1930.
11. Ware County, Dr. W. L. Pomeroy, Waycross, May 21, 1930.
12. Cobb County, Dr. L. L. Welch, Marietta, August 2, 1930.
13. Crisp County, Dr. J. N. Dorminy, Cordele, September 6, 1930.
14. Terrell County, Dr. Logan Thomas, Dawson, September 13, 1930.

### 1931 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 4, 1930.

\*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.



The paper was greatly enjoyed, the lantern slides making it more graphic and interesting.

The third paper on the program was read by Dr. W. L. Wilkinson, of Bainbridge, entitled "The Association of Abdominal Pain with Throat Infections in Children". This paper was discussed by Doctor Jenkins, of Thomasville, who confirmed Doctor Wilkinson's opinion that abdominal pain in children is frequently associated with inflammatory throat conditions. Doctor Wilkinson stated in closing that it would be well to wait in cases of abdominal pain in children who were at the same time suffering from an acute condition of the throat.

The fourth paper, entitled "The Pelvic Organs in the Female", was presented by Dr. A. D. Little, of Thomasville. Doctor Little discussed this subject from the pathological standpoint. In discussing Doctor Little's paper, Doctor Chason, of Bainbridge, urged better obstetrics and better after care. He condemned the extensive use of pituitrin. Doctor Jenkins, in discussing the same paper, stated that the control of social diseases was important. In some Scandinavian countries a central agency keeps a record of all cases and their treatment. Doctor Little, in closing, thanked the society for its interest in his paper and the discussion.

After this paper a short recess was taken before completing the program. Doctor Moore, of Cuthbert, President-elect of the State Society, made a few remarks concerning the future of the organization and the hopes for it during the coming year. Following Doctor Moore's remarks, the Program Committee reported as follows:

Paper for Next Meeting on Surgery—Dr. J. M. Barnett, Albany.

Paper on E. E. N. and T.—Dr. H. M. Moore, Thomasville.

Paper on General Practice—Dr. W. A. Walker, Cairo.

Paper on Medicine—Dr. C. H. Ferguson, Thomasville.

The Nominating Committee offered the following names for officers for the coming year: President, Dr. W. A. Walker, Cairo; Vice-President, Dr. I. W. Irvin, Albany; Secretary-Treasurer, Dr. C. H. Watt, Thomasville; Counselor for this District, Dr. J. A. Redfearn, Albany.

Dr. Gordon Chason moved that we continue our meetings in the afternoon. This was seconded by Doctor Keaton and carried unanimously.

The fifth paper on the program, entitled "Malaria Control", by Dr. D. H. D. Griffiths, of Albany, was a most interesting one.

The paper was illustrated by motion pictures of methods used in Dougherty County for the control of malaria, showing the cleaning up of ponds and the spraying of Paris green. It was very instructive and interesting to the majority of the members of the society who had never actually seen these methods in practice. The paper was discussed by Doctor Barnett, who was familiar with this work in Dougherty County, and he stated that it was of inestimable value. The subject was also discussed by Doctors Redfearn, Holland, Jenkins, Warnell, and E. F. Wahl. The question of the use of plasmochin was discussed at length.

Cairo was chosen as the next place of meeting, after which the meeting adjourned.

CHAS. H. WATT, M.D., *Secretary*,  
Second District Medical Society.

### NOTED DOCTORS VISIT LOUISVILLE

The regular meeting of the Medical Society of the Tenth District of Georgia was held in Louisville at the courthouse on Thursday, August 28th. The meeting was called to order at 10 o'clock by the President, Dr. W. J. Cranston, of Augusta.

The following instructive and interesting program was ably carried out:

#### "Malaria Symposium"

Malaria as seen in Jefferson County—Dr. S. C. Ketchin.

Laboratory Diagnosis and Treatment of Malaria—Dr. H. G. Mealing.

Malaria Fever—Dr. J. Dewey Gray.

Discussion—Dr. V. P. Sydenstricker.

Lobar Pneumonia—Dr. Irvin Phinizy.

Discussion—Dr. J. H. Butler.

Infant Feeding—Dr. C. M. Burpee.

Discussion—Dr. H. P. Harrell.

A Standard Treatment of Early Syphilis—Dr. W. R. Houston.

Discussion—Dr. G. T. Bernard.

Plastic Surgery of the Temporo Mandibular Joints—Dr. Everard A. Wilcox.

Discussion—Dr. H. M. Michel.

Cancer—Dr. R. L. Rhodes.

Discussion—Dr. C. W. Crane.

Many helpful points were brought out in the very interesting and educative discussions, particularly those of malaria and pneumonia.

This meeting brought together many distinguished doctors of the State. Among those present were: Dr. G. Y. Moore, President of the Medical Association of Georgia.

Dr. S. T. R. Revell, Second Vice-President of the Medical Association of Georgia.

Dr. Eugene Murphy, noted clinician.

Dr. Winchester, representative of the State Board of Health.

Dr. W. A. Mulherin, pediatrician.

Dr. R. L. Rhodes, Vice-President of the Southern Surgical and Gynecological Society.

Dr. V. P. Sydenstricker, Professor of Medicine, Department of Medicine, University of Georgia.

Dr. G. T. Bernard, Professor of Dermatology, Department of Medicine, University of Georgia.

Dr. R. H. Chaney, Professor of Surgery, Department of Medicine, University of Georgia.

Dr. W. J. Cranston, President of the Tenth District Medical Society.

Dr. A. J. Kilpatrick, Professor of Obstetrics, Department of Medicine, University of Georgia.

Dr. Soper, Commanding Officer of Linwood Hospital.

Dr. J. J. Pilcher, President of the Jefferson County Medical Society.

And other outstanding men of the medical profession.

At the conclusion of the program there was a motion for adjournment and at one o'clock dinner was served the doctors at the Jefferson Hotel. The program for the dinner hour and the decorating of the dining room were in charge of the members of the Woman's Auxiliary to the Medical Society of Jefferson County. The dining room was beautifully decorated in glowing fall flowers. The tables were arranged in the shape of an X. At each place a greeting from the Woman's Auxiliary of the local society and a case of hypodermic tubes were placed as souvenirs. The greeting was written by Mrs. S. T. R. Revell, Vice-President of the Woman's Auxiliary to the Medical Association of Georgia and President of the Woman's Auxiliary of Jefferson County Medical Society.

#### Greetings

"Honored indeed is this little town of ours.  
To have in our midst such great men whose powers  
Are dedicated to the relief of mankind.  
The "Credo" of your profession, we have  
in mind ;  
How, with purity and holiness, you practice your art.  
And in daily service, play life's noblest part,  
But we cannot continue your praises to sing  
Unless the next time your wives you will bring."

The first number on the program was a duet, "Whispering Hope," beautifully sung by Mrs. S. C. Ketchin and Mrs. J. D. Peacock, ably accompanied by Mrs. W. R. Holmes. After this number Mrs. G. Y. Moore, wife of the President of the Medical

Association of Georgia, was gracefully introduced by Mrs. S. T. R. Revell.

The next number was a clever contest, "Who's Who?" This proved very entertaining and amusing. The verses of this contest were written and charmingly read by Mrs. S. T. R. Revell. Three minutes were allowed the doctors for the guessing of each number.

#### "Who's Who?"

##### No. 1

"To Cos we must go, and there we will find  
The greatest physician of ancient time;  
This "father of medicine" thought so deep  
and so sound  
That his creed for the profession has world-wide renown."

Answer 1.

HIPPOCRATES

##### No. 2

"He was a London physician who attended  
the king,  
But his gift to humanity was a far greater thing;  
In his first step he proved man's arteries  
had blood and not air,  
And then he went on to show that circulation was there."

Answer 2

HARVEY

##### No. 3

"The savior of industry! the discoverer of germs!  
But the praises of this man demand still higher terms.  
To give his best to his brethren he was so very desirous  
That he sought and he sought till he found anti-rabic virus."

Answer 3

PASTEUR

##### No. 4

"Antiseptic surgery, this great boon to mankind,  
Was his gift to humanity from his wonderful mind;  
That great man was a surgeon, lord, baronet, peer,  
That he belongs with the immortals is perfectly clear."

Answer 4

LISTER

##### No. 5

"We ache and we shake until our bones almost break;



A diagnosis they can make if our blood  
they will take.  
But perhaps you have guessed, for we're  
sure you're not dumb,  
That we have with us here the discoverer  
of the plasmodium."

*Answer 5*  
LAVERAN

No. 6

"We are so thankful for many things!  
But for your eye, our praises we sing!  
We are glad God made you thus,  
So you could find the tubercle bacillus."

*Answer 6*  
KOCH

No. 7

"Of this list of immortals, we've reached the  
last, but the best;  
He made no single contribution like most  
of the rest,  
But was teacher, clinician, writer, lover of  
men,  
And his nobility of soul is beyond descrip-  
tion of pen."

*Answer 7*  
OSLER

The prize for the contest, a hypodermic outfit, was awarded Doctor Soper, of Augusta. In the concluding number of the program a group of Boy Scouts—Dixon Warren, Walter Revell, Gene McBride, and Allen Stiles—stood at attention around an American flag while the doctors paid homage to their country by rising and singing "The Star Spangled Banner". The members of the Auxiliary then withdrew. One of the high points in the day's entertainment was then reached, when Dr. G. Y. Moore, of Cuthbert, the distinguished guest of the occasion, made a splendid address.

During the afternoon session the following officers were elected:

Dr. S. C. Ketchin, of Louisville, President.

Dr. Bradford, of Milledgeville, Vice-President.

Dr. J. R. Lewis, of Louisville, Secretary and Treasurer.

We are fortunate in our little town in having all of our doctors of sufficiently outstanding ability and with qualities which are recognized by others of their profession to be elected to high offices of the Medical Societies of the State. One holds the office of Second Vice-President of the Medical Association of Georgia and two hold offices in the Tenth District Medical Society.

—*News and Farmer*, Louisville.

## NINTH DISTRICT MEETING

The regular fall meeting of the Ninth District Medical Society met at Toccoa, September 17th. The session was held in the Woman's Clubhouse. Called to order and presided over by the President, Dr. Francis M. Hubbard, of Commerce. Doctor Hubbard has passed his eightieth mile post, but does not act or look like he has done so. He presided with poise and dignity, and his wit was sparkling.

Invocation was offered by the Rev. W. J. DeBardeleben, Address of Welcome by Dr. C. L. Ayers, and response by Dr. A. A. Rogers, of Commerce.

Dr. G. Y. Moore, of Cuthbert, President of the Medical Association of Georgia, made an address. He was given the closest attention while he discussed organized medicine, the importance of a live county society that will meet regularly, with an active secretary who will arrange good programs, collect dues and make prompt reports. The magnificent work of the State Board of Health with its limited means was praised. Dr. Lon Grove, of Atlanta, read an interesting paper on "The Acute Abdomen", with special reference to the appendix. Doctor Brown, of Royston, was present as a visitor, and discussed Doctor Grove's paper, as did Dr. M. B. Allen, of Hoschton. Dr. Arthur G. Fort, President-Elect of the Association, was next presented. Glad to be here, he said, and spoke especially of "The Medical History" now being prepared, and urged the members to subscribe for it. Dr. W. L. Funkhouser, of Atlanta, discussed "Diarrhoea in Children", associated with Otitis Media. He gave some of his experiences with these cases in the baby hospitals he attends. His essay was discussed by Doctors Fort and W. W. Anderson, of Atlanta. A memorial on the life of Dr. Edward T. Gibbs, deceased, was presented by Dr. H. Scott Titshaw, and same to be forwarded to the State Secretary to be printed in THE JOURNAL. The next discussion was an interesting talk by Dr. H. H. Lancaster, of the Allen Hospital and Clinic, Hoschton. It was discussed by Doctors Titshaw, Funkhouser, Grove, and Brown. Dr. Joe P. Bowdoin, of the State Board of Health, was next called, and talked briefly. He said the board was ready and willing to help the doctors throughout the State, and insisted the county boards of health should be organized. The members consist of the chairman of the Board of County Commissioners, the County School Superintendent, and a physician, to be selected by the grand jury.

Luncheon was served at the Albemarle Hotel, during which inspiring music was furnished by Mrs. J. B. Cheatham, Mrs. L.



Pitts, Misses Ruth Barron and Holliday and Frank Gross. About thirty physicians were in attendance.

The next meeting will be at Gainesville the third Wednesday in March, 1931.

J. C. BENNETT, M.D., *Secretary*,  
Jefferson, Georgia.

## FIFTH DISTRICT MEDICAL SOCIETY MEETS

*Douglasville, Georgia*

October 1, 1930

The semi-annual meeting of the Fifth District Medical Society was held here today. Invocation by Rev. E. B. Awtry, pastor of the First Baptist Church. Address of welcome by Dr. D. Houseworth, Douglasville.

A number of interesting papers were read, among which were: Dr. J. C. Norris, Atlanta, "A Study of One Hundred Cases of Typhoid Fever in the Negro Race"; Dr. H. Homer Allen, Decatur, "Typhoid Fever in Children"; Dr. C. W. Strickler, Atlanta, "The Treatment of Pneumonias"; Dr. Vernon Powell, Atlanta, "Pellagra"; Dr. J. R. McCord, Atlanta, "Conservative Obstetrics."

The following officers were elected for the coming year: Dr. C. W. Strickler, Atlanta, President; Dr. D. Houseworth, Douglasville, Vice-President; Dr. Hulett H. Askew, Atlanta, Secretary-Treasurer. The following committee was appointed to arrange the date for the coming meeting: Drs. O. O. Fanning, Atlanta; D. Houseworth, Douglasville; M. T. Harrison, Atlanta.

Among those attending the meeting were Drs. R. E. Hamilton, D. Houseworth, J. M. Boyd, T. B. Whitley, C. V. Vansant, E. B. Awtry, F. M. Stewart, all of Douglasville; Drs. L. Minor Blackford, C. W. Strickler, Guy D. Ayers, J. A. McGarity, O. O. Fanning, J. N. Brawner, W. A. Selman, J. R. McCord, V. E. Powell, S. P. Sanford, T. L. Byrd, E. C. Thrash, J. Calvin Weaver, Hulett H. Askew, Jack C. Norris, Claud L. Key, M. T. Harrison, J. F. Schneider, A. M. Johnson, W. E. Person, all of Atlanta; Drs. J. R. Evans, H. Homer Allen, H. G. Ansley, all of Decatur, and many others from adjoining counties.

Dr. G. Y. Moore, Cuthbert, President of the Medical Association of Georgia, was unable to attend. Dr. E. C. Thrash presided.

A delightful luncheon was served by the doctors' wives and other ladies of Douglasville.

HULETT H. ASKEW, M.D.,  
*Secretary*.

Atlanta.

## COMMUNICATIONS

### INVITATION TO LOUISVILLE-SOUTHERN MEDICAL ASSOCIATION

*To the Editor:*

The Jefferson County Medical Society, which will be host to the Southern Medical Association during its annual meeting in Louisville, Ky., November 11 to 14, 1930, desires cordially to invite you to this event which will be the most outstanding medical convention ever assembled in Louisville.

There are many reasons, too numerous to mention, why the rank and file of the medical profession in the South, and in other States adjacent to Kentucky, should be interested in attending this meeting. Louisville is looking forward with the keenest interest to the time when it shall open its arms in a hearty greeting to those who shall attend.

Louisville, as well as the State of Kentucky, is rich in scenic beauty, and there are numerous points of historic interest which will have a strong appeal to many who have already signified their interest in the stories about Louisville which have been running in the Journal of the Southern Medical Association.

The scientific work of this Association is well known to your editorial staff. There will be on the program of the Louisville meeting many physicians and surgeons of national and international reputation whose papers and discussions will be of outstanding interest to all in attendance.

We shall very greatly appreciate an editorial comment in your valuable journal regarding the Louisville meeting, or the publication of this brief notice.

EMMET F. HORINE, M.D., *President*,

Jefferson County Medical Society.

W. E. GARDNER, M.D., *Chairman*,

Publicity Committee.

Louisville, Ky., Sept. 23, 1930.

*To the Editor:*

In order that you may know that even during such hard times we Albany doctors are bearing down on collections, a fact that reminds us that there are still such things as saddles, I submit the following letter just received:

"Dear Doctor Redfearn:

"As I explained to Doctor Irvin, mother did not have a pecan crop last year and there is none again this year, so that we haven't any income. I would like to settle all my debts. Do you know of anyone who would give a good loan on a pecan grove?"

"My husband does not pay me alimony. I received a total divorce from him.

"Possibly you would be willing to take a \$30 English riding saddle in exchange. If so, phone Mrs. W. She is holding it for me. I can truthfully say that it is the most comfortable one I ever used."

Let's start an exchange club through THE JOURNAL.

J. A. REDFEARN, M.D.

Albany, Ga., October 3, 1930.

## GEORGIA STATE NURSES' ASSOCIATION

## Officers

*President:* Miss Lucia Massee, R. N.,  
Cuthbert, Ga.

*First Vice-President*

Miss Alice F. Stewart, R. N.,  
University Hospital, Augusta.

*Secretary*

Mrs. J. F. Hawthorne, R. N.,  
410 Arnold St., N. E., Atlanta.

*Second Vice-President*

Mrs. Mae M. Jones, R. N.,  
Georgia State Sanitarium, Milledgeville.

*Treasurer*

Miss Jane Van De Vrede, R. N.,  
131 Forrest Ave., N. E., Atlanta.

## COUNCILORS

Miss Annie Bess Feebeck, R. N.,  
Grady Memorial Hospital, Atlanta.

Miss Vera Mingledorff, R. N.,  
209½ West Duffy St., Savannah

Miss Margaret Dorn, R. N.,  
1117 Telfair St., Augusta.

Miss Hattie Wilder, R. N.,  
118 Stonewall Place, Macon.

RELAYED FROM NATIONAL  
HEADQUARTERS

(American Nurses Association)

*"Telling the Patient"*

"Cap and uniform do not make a nurse. Of course you know that. But does your patient? Do not most patients take it for granted that the nurse secured from the nearest registry is sure to be reliable and a real 'trained nurse'?"

"Every time you take a new case you have the opportunity to explain to that patient and his family the meaning of the R. N. after your name. Show your State registration card, and tell why registration is necessary if the patient is to be protected from unskilled nursing care. Then, the next time a nurse is needed in that family, only a registered nurse will be acceptable because that family has learned to safeguard itself against possible untrained women calling themselves nurses and wearing the becoming cap and uniform."

*"The Convalescent"*

"This seems to be a period of 'taking stock' in medicine, nursing, and the allied professions. In analyzing the medical and nursing needs of the community, two groups seem to be conspicuously in need of more adequate service, the convalescent and the chronic, and that parallel and sometimes synonymous problem, the prolonged disability case.

"For this reason the *Symposium on Convalescent Care* is a particularly valuable publication. Published recently by the American

Conference on Hospital Service, the booklet includes six papers and discussions on convalescent care, as given at the 1930 Conference on Hospital Service.

"In introducing the subject, Dr. Harry E. Mock, President of the Conference, said: 'Today, in this meeting, we are pioneering in a new field of health service. As proof of that statement is the fact that this is the first medical meeting ever held anywhere in which the entire program has been devoted exclusively to considering the problems of convalescent care. It is fitting that this be held in connection with one of the national meetings of our American Medical Association, but even more fitting that it be held under the auspices of the American Conference on Hospital Service. This Conference is composed of nineteen national medical, hospital, nursing and allied associations—all vitally interested in and all having something to contribute to the solution of the problems of the further care of the prolonged disability case after he leaves the hospital.'

"A. N. A. delegates to the Conference are Miss Adda Eldredge and Miss Evelyn Wood, and it was upon motion of Miss Eldredge that the Board of Directors at its recent meeting voted that nurses be told through the Bulletin of the availability of this leaflet. Copies of this report may be obtained from the Free Press Printing Company, Burlington, Vt."

*Decline in Tuberculosis*

The problem of tuberculosis among women, especially among nurses, is one

which has caused concern for many years. Since 1911 when the National Relief Fund of the American Nurses Association was begun, 258 of the 543 beneficiaries have been suffering from tuberculosis, and it will be recalled that at the Louisville convention in 1928, this angle of the relief problem was a much-discussed subject. For this reason the following statement from the Metropolitan Life Insurance Company is particularly pertinent:

"The time has gone when a new low point in tuberculosis mortality occasions surprise. Only eighteen years ago, 1911, the tuberculosis death rate of Metropolitan industrial policyholders was 224.6 per 100,000 lives exposed to risk. This disease, far and away, was the leading cause of death with a mortality rate of 58 per cent in excess of that for the second cause, heart disease. In 1929 tuberculosis death rate will be only a little more than one-third the figure of 1911. It is not enough to say that tuberculosis is destined to be displaced as one of the leading causes of death. It is indeed going to rank among the relatively minor causes of death; and the end of the next decade should see it well on its way to a death rate of 40 per 100,000."

*Florence Nightingale's Birthplace*  
(League Calendar for 1931)

Hitherto unpublished pictures of Florence Nightingale's birthplace, the Villa Columbia, in Florence, Italy, will adorn the 1931 calendar of the National League of Nursing Education. These photographs were taken with the permission of the present owners of the Villa by Miss Alice Fitzgerald, who gave them to the League. Quoting from a description of the calendar:

"The frontispiece is the view from the garden over Florence, showing *in colors* the keynote of the city, the Duomo and Giotto's Campanile, with the Ponte Vecchio leading across the river to them, and with the hills near Fiesole as a background. Lovers of Florence will want the calendar just for these views, and all nurses will want pictures of the lovely garden and house where Florence Nightingale came into the world.

and where she began to absorb some of the beauty which later flowered in her life."

Travelers of the old world, particularly those who have traveled in Italy, will be interested in obtaining this beautiful calendar, which is available to every one at \$1.00 per single copy, and at 75 cents per copy on all orders of fifty or more, delivered in one shipment. The proceeds of the sale, as all nurses know, are used to help maintain and develop the activities of the National League of Nursing Education, which is trying to help prepare better nurses for the community.

Churches and other organizations wishing to patronize the National League are invited to purchase calendars through the Georgia Chairman, Mrs. Eva S. Tupman, Grady Hospital, Atlanta. Mrs. Tupman is President of the Georgia League of Nursing Education.

The Georgia State Nurses Association, through its district and alumnae organizations, is assisting in the distribution of these League calendars, which may be obtained from the Calendar Committee in each district.

Calendars are sent out as ordered, but cannot be returned unless special arrangements are made in advance to do so.

Individuals may secure copies of the League calendar at the Headquarters of the G. S. N. A., 131 Forrest Avenue, N.E., Apartment 11, Atlanta.

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MEETING OF THE ADVISORY COUNCIL OF  
THE GEORGIA STATE NURSES ASSOCIATION

Just a last word to remind you of the coming convention of the G. S. N. A., October 27-28-29. Registration will begin Sunday afternoon, October 26th, and an informal reception will be held at the Ansley Hotel roof garden during the afternoon and evening.

A meeting of the Executive Board of the G. S. N. A. will be held at 4:30, and a meeting of the Advisory Council will be held from 8 to 9 o'clock Sunday evening. The Advisory Council is composed of the officers of the State Association, the presidents of all districts, the chairmen of all committees, the chairmen of all sections, the presidents of the alumnae associations, one officer of the State Board of Examiners, and the chairman of the State Committee on Red Cross Nursing Service.



## WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA OFFICERS

President.....	Mrs. Chas. C. Harrold, Macon	Recording Sec.....	Mrs. J. Cox Wall., Eastman
President-Elect.....	Mrs. Ralston Lattimore, Savannah	Cor. Sec.....	Mrs. Wm. R. Dancy, Savannah
First Vice-President.....	Mrs. S. T. R. Revell, Louisville	Treasurer.....	Mrs. Ben Bashinski, Macon
Second Vice-President.....	Mrs. W. W. Battey, Sr., Augusta	Parliamentarian.....	Mrs. A. H. Bunce, Atlanta
Third Vice-President.....	Mrs. J. E. Penland, Waycross	Editor.....	Mrs. C. W. Roberts, Atlanta

### PRESIDENT

The Woman's Auxiliary to the Medical Association of Georgia enjoys at the present time the distinction of having its first president, Mrs. James Newton Brawner, filling the high office of president of the Woman's Auxiliary to the Southern Medical Association. The approaching meeting of the Auxiliary, convening with the annual session of the Southern Medical Association at Louisville, will be marked by evidences of an enthusiastic and noteworthy administration and will be entirely in keeping with the high order of service which Mrs. Brawner has rendered her own State organization. Mrs. Brawner has preferred to have her election to this position of leadership interpreted as a compliment to the entire membership of her State Auxiliary and has accepted the honor as a recognition of their combined activities. She urges all those who can arrange to do so to attend and take part in the Louisville session.

The program of the meeting follows:

### SEVENTH ANNUAL CONVENTION OF THE WOMAN'S AUXILIARY SOUTHERN MEDICAL ASS'N

*Louisville, Ky., November 11 to 14, 1930*

#### BUSINESS PROGRAM

*Tuesday, November 11*

11:00 A.M.—Meeting of the Executive Board, Brown Hotel, Private Dining Room, Mezzanine Floor; Mrs. James N. Brawner, presiding.

*Wednesday, November 12*

9:00 A.M.—General Session, Brown Hotel Roof Garden. (All women attending the Annual Session of the Southern Medical Association are invited to attend.)

*Thursday, November 13*

9:00 A.M.—Post Session Meeting of the Executive Board, Brown Hotel, Private Dining Room; Mrs. S. A. Collom, presiding.

#### PROGRAM OF ENTERTAINMENT

Mrs. George A. Hendon, Chairman.  
Louisville, Ky.

*Tuesday, November 11*

4:00 to 5:00 P.M.—Tea at the Louisville Woman's Club.

9:00 P.M.—The President's Reception, Knights of Columbus Hall.

*Wednesday, November 12*

1:00 P.M.—Luncheon, Brown Hotel, Crystal Ballroom; Speaker, Dr. Gordon Bates, General Secretary, Canadian Social Hygiene Council; subject, "What Is Social Hygiene?" (Given under the auspices of the Social Hygiene Association of Kentucky.) All ladies attending the Southern Medical Meeting are invited. Tickets \$1.00 each.

6:30 P.M.—Dinner, followed by a musicale, Ballroom, Pendennis Club.

*Thursday, November 13*

9:00 A.M.—Drive.

#### PROGRAM—GENERAL MEETING

*Woman's Auxiliary to the Southern  
Medical Association*

Roof Garden, Brown Hotel, 9:00 A.M.

Mrs. James N. Brawner, President

Invocation—Rev. C. W. Welch, D.D., pastor Fourth Avenue Presbyterian Church, Louisville, Ky.

Report of Entertainment Committee—Mrs. George A. Hendon, Chairman, Louisville, Ky.

Address of Welcome—Mrs. P. E. Blackerby, Retiring State President, Louisville.

Greetings from Woman's Auxiliary, Kentucky State Medical Association—Mrs. E. B. Houston, President, Murray, Ky.

Greetings from Woman's Auxiliary, Jefferson County Medical Society—Mrs. John K. Freeman, President, Louisville.

Response to Address of Welcome and Greetings—Mrs. Milton S. Lewis, Nashville, Tenn.

Report of Credentials Committee—Mrs. C. W. Roberts, Chairman, Atlanta, Ga.

Reading of the Minutes—Mrs. H. W. E. Walther, Secretary, New Orleans, La.

Report of Parliamentarian—Mrs. Irvin Abell, Louisville, Ky.

Report of Program Committee—Mrs. Allen H. Bunce, Chairman, Atlanta, Ga.

Greetings from Woman's Auxiliary, American Medical Association—Mrs. J. Newton Hunsberger, President, Norristown, Pennsylvania.

Introduction of Honor Guests—Mrs. C. W. Garrison, Little Rock, Ark.

Report of the President—Mrs. James N. Brawner, Atlanta, Ga.

Reports of Officers—Mrs. Arthur L. Walters, First Vice-President, Miami Beach, Fla.; Mrs. Edward Clay Mitchell, Second Vice-President, Memphis, Tenn.; Mrs. H. W. E. Walther, Recording Secretary, New Orleans, La.; Mrs. C. W. Roberts, Corresponding Secretary, Atlanta, Ga.; Mrs. W. W. Crawford, Treasurer, Hattiesburg, Miss.; Mrs. A. T. McCormack, Historian, Louisville, Ky.; Mrs. Irvin Abell, Parliamentarian, Louisville, Ky.

Reports of Committees—Publicity, Mrs. D. A. Rhinehart, Little Rock, Ark.; Resolutions, Mrs. Southgate Leigh, Norfolk, Va.; Special Committee, Mrs. S. A. Collom, Texarkana, Texas.

Greetings from Southern Medical Association—Dr. Hugh S. Cumming, President, Washington, D. C.

Address—Dr. E. H. Cary, Dallas, Texas.  
State Reports (limited to three minutes each).

Unfinished Business.  
Report of Nominating Committee.  
Election of Officers.  
Installation of the President.  
Introduction of New Officers.  
New Business.  
Adjournment.

## NINTH DISTRICT MEETING

The Woman's Auxiliary to the Ninth District Medical Society met in Toccoa on September 17th.

Mrs. C. B. Almand, Winder, District Manager, presided.

The meeting was opened by repeating the 23rd Psalm in concert.

In response to roll-call reports were given from three counties.

Mrs. W. H. Garrison reported for Habersham County. The Auxiliary had contributed to the Student Loan Fund and co-operated with other organizations in the county doing health work.

Mrs. C. B. Almand reported for Barrow County. The Auxiliary has six active members, who have secured and shown a health film, donated to the Student Loan Fund, entertained the members of the Barrow County Medical Society, and sponsored a clinic where toxin-antitoxin was given to fifty-four children.

Mrs. Myron B. Allen reported for Jackson County. The Auxiliary has been active in health work, co-operating with other organizations. Contributed to the Student Loan Fund. Entertained the members of the local medical society at picnics and instrumental in securing the reorganization of the Jackson County Medical Society.

Mrs. C. B. Almand introduced Mrs. Chas. C. Harrold, Macon, President of the Auxiliary to the Medical Association of Georgia; Mrs. Chas. C. Hinton, Macon, Past President; Mrs. J. A. Selden, Macon, Chairman of the Health Film Committee.

Mrs. Almand asked each local Auxiliary to send shrubbery and bulbs to the State Tuberculosis Sanatorium at Alto for the lawn of the Children's Hospital. She appointed a committee from the members of the Woman's Auxiliary to the Habersham County Medical Society to confer with the superintendent to ascertain what is needed by the children to make them comfortable and happy at Christmas.

Mrs. Chas. C. Harrold, President of the State Auxiliary, explained the different phases of the work, including the Student Loan Fund, Health Education, and the needs of each department over the State. She suggested that each Auxiliary keep a scrap book and described the one kept by the State Chairman, Mrs. J. E. Penland, Waycross. Her address was full of enthusiasm and encouragement.

Mrs. J. A. Selden, Macon, State Chairman of Health Films, gave a comprehensive talk on Health Films, and described the films available in the library. She gave an interesting account of the children's matinee given in Macon by the Woman's Auxiliary to the Bibb County Medical Society on September 13th.

Mrs. Chas. C. Hinton, Macon, Past President, complimented the members of the Ninth District Auxiliary on its organization and urged the members to seize the opportunity to do health work in the schools.

Dr. G. Y. Moore, Cuthbert, President of the Medical Association of Georgia; Dr. A. G. Fort, Atlanta, President-elect; Dr. Lon Grove, Atlanta, and Dr. Joe P. Bowdoin, Atlanta, brought greetings from the Association.

Miss Elizabeth Powers delighted the members with a selection of readings.

The meeting adjourned and the members joined their husbands in the dining room of the hotel. Luncheon was served.

Respectfully,

MRS. C. B. ALMAND, *District Mgr.*  
MRS. MYRON B. ALLEN, *Rec. Secy.*



## EIGHTH DISTRICT MEETING

The Woman's Auxiliary to the Eighth District Medical Society held its annual meeting at the Washington Woman's Club, Washington, on August 13th.

Meeting called to order by the President, Mrs. Paul L. Holliday, Athens.

Invocation by Mrs. T. J. Wills.

Welcome Address by Mrs. C. E. Wills.

Response to Address of Welcome by Mrs. B. C. Teasley.

The following were appointed as a Nominating Committee: Mrs. B. C. Teasley, Mrs. H. W. Birdsong, and Mrs. A. C. Smith.

Special music by Mrs. Henry Sparks.

Report of Nominating Committee.

Mrs. D. N. Thompson, Elberton, elected manager for the Eighth District Auxiliary.

Reports from local Auxiliaries.

Seven counties were represented.

Address by Mrs. C. C. Harrold, Macon, President of the State Auxiliary.

Duet, "Shubert's Serenade," by Mrs. R. C. Norman and Mrs. Oliver Callaway; accompaniment by Miss Penelope Wills.

Address, entitled "The Right Kind of Recreation", by Mrs. Charles C. Hinton, Macon.

Address, entitled "The Influence of Motion Pictures", by Mrs. J. A. Selden, Macon.

Meeting adjourned to attend barbecue dinner at Country Club, followed by entertainment at Kiwanis Club. Historical scenes were visited.

## NEWS ITEMS

The Fifth District Nurses Association, Atlanta, a constituent society of the Georgia State Nurses Association, will sponsor a Maternity Institute to be held at the Ansley Hotel, Atlanta, on October 30-31. The Institute will be conducted by Miss Anita Jones, Assistant Director, Maternity Center Association, New York City. There will be two sessions daily, 10 to 12 a.m. and 2 to 4 p.m. A fee of \$3.00 will be charged. Nurses who anticipate taking the course may write to Miss Lillian Cumbee, Registrar, Wesley Memorial Hospital, Emory University, Georgia.

The United States Public Health Service in its health news states that if all goiters were benign in character the treatment of the disease would be comparatively simple and satisfactory. Indeed, it might be possible to refer a patient to the corner grocery or drug store for some simple remedy which would, promptly and without fail, afford complete relief. In fact, many misguided individuals have adopted such a course without waiting for competent medical counsel. Alluring advertisements of proprietary goiter "cures" and unwise recommendations for the use of this or that home remedy find too many ready followers. Not only is valuable time lost in this way, but it is entirely probable that considerable damage

is inflicted. Certain it is that mismanagement of goiter in its early stages often intensifies minor symptoms and makes later scientific treatment more difficult.

The Southern Medical Journal in the October number states that: "One of the best meetings in the history of the Southern Medical Association was in Louisville, Ky., in 1920. Now, after a lapse of ten years, the Jefferson County Medical Society, Louisville, is again host to the Southern Medical Association. Louisville is said to be 'at the Crossroads of the Nation', accessible to, and easily reached from, all points in the South as well as in the Eastern, Central, and Western States. Louisville is a great medical center, having early in the nation's history taken its place as a seat of medical learning. There have gone out to the South from the medical schools of Louisville, now all merged into the School of Medicine, University of Louisville, perhaps more graduates than from any other medical center." November 11-12 will be general clinical days, the first day to be made up by members of the Louisville profession and the second day by physicians outside the host city. Eighteen sections and conjoint meetings will hold their sessions on November 13-14. The evening of November 12th has been set aside for alumni dinners. An excellent program of entertainment has been arranged. The President's reception and grand ball will be given on Tuesday evening, November 11th. There will be other social functions, with special entertainment for the visiting ladies. Permanent trophies will be given the winning contestants in the usual golf tournaments and trap-shooting. Tickets at reduced rates will be sold by all railroads in the South.

The Jackson County Medical Society met at the Harrison Hotel, Jefferson, on October 2nd. Dr. L. C. Allen, Hoschton, read a paper entitled "Convulsions in Children". The article was discussed by all the members present. Luncheon was served after the completion of the scientific program.

The annual entertainment of the members of the Jackson County Medical Society by the Woman's Auxiliary was given at Potter's Bridge on September 11th. Dr. Laetus Sanders, Commerce, in very appropriate language, thanked the members of the Auxiliary for the luncheon and their interest in bringing the members of the society together for social companionship and good-will.

The Second District Medical Society met at the North Side Grammar School, Cairo, on October 10th. Dr. W. A. Walker, Cairo, delivered an address; Dr. George H. Noble, Atlanta, read a paper entitled "Cutting of Flaps in Amputation of Mammary Gland with View of Preventing Necessity of Skin Graft and Preserving Full Range of Arm Motion"; Dr. Seale Harris, Birmingham, Ala., read a paper, "Curing the Ulcer Patient"; Dr. H. M. Moore, Thomasville, "Iritis", and Dr. C. H. Ferguson, Thomasville, "Pellagra".

The Ware County Medical Society will sponsor a tuberculosis clinic to be held each month in Waycross.



The Glynn County Medical Society at its meeting held at Brunswick on September 24th unanimously endorsed the campaign being conducted by the State Tuberculosis Sanatorium of Alto for the diagnosis and control of tuberculosis.

The Wilcox County Medical Society held its monthly meeting at Abbeville on August 28th. All the members of the society were present. The discussion of "preventative medicine" constituted the scientific program. The members of the society agreed to make up "delinquent lists" each month for the benefit of the physicians, similar to the plans formulated by other societies. While they expect to take care of the practice for the indigent sick, the able-bodied and all those who can pay for medical service will be forced to do so.

Dr. H. Cliff Sauls announces the association of Dr. Carter Smith for the practice of internal medicine. Office 703 Medical Arts Building, Atlanta. Consultation by appointment only.

The Eleventh District Medical Society met at Quitman on October 14th. Dr. M. E. Winchester, Atlanta, Director of the Division of County Health Work, read a paper entitled "Expansion of Full Time Health Work in Every County of the State by forming Health Districts; discussed by Dr. R. E. McClure, Quitman. Dr. S. J. Sinkoe, Atlanta, read a paper on "Hematuria in Longevity"; Dr. W. L. Pomeroy, Waycross, "Injection Method of Treating Varicose Veins"; Dr. William R. Dancy, Savannah, "Mucous Colitis—An Entity"; Dr. G. Y. Moore, Cuthbert, President of the Association, "Address on Organized Medicine". The next meeting of the society will be held at Valdosta. Dr. E. L. Jelks, Quitman, was elected President; Dr. T. H. Smith, Valdosta, Vice-President, and Dr. W. F. Reavis, Waycross, was re-elected Secretary-Treasurer.

The Georgia Urological Association will hold its first meeting at the Academy of Medicine, 38 Prescott Street, N.E., Atlanta, on October 30, 1930. The morning session will be devoted to case reports, abstracts of case records, specimens and roentgenograms. One or more prominent visitors will appear on the afternoon program which will be taken up with the reading of five or six scientific papers.

The Fifth District Medical Society met at Douglasville on October 1st. The scientific program consisted of the following titles of papers: "Typhoid Fever—A Study of 100 Cases," by Dr. Jack C. Norris, Pathological Department of Emory University, Division of Grady Hospital, Atlanta; "Typhoid Fever in Children," by H. Homer Allen, Decatur; "The Treatment of the Pneumonias," by Dr. C. W. Strickler, Atlanta; "Pellagra," by Dr. Vernon Powell, Atlanta; "Conservative Obstetrics," by Dr. James R. McCord, Atlanta.

The Spalding County Medical Society met at the Griffin Hospital, Griffin, on September 16th.

The Atlantic Coast Line Railroad Surgeons Association held its annual meeting at Sea Island Beach on October 20th. Dr. Robert Slocum, Wilmington, Del., Medical Director of the road, attended the meeting.

The Randolph County Medical Society held its monthly meeting in Cuthbert on October 2nd. Dr. F. M. Martin, Shellman; Dr. W. W. Crook, Cuthbert, and Dr. D. L. Smith, Cuthbert, gave case reports.

The Washington County Medical Society met at Sandersville on September 17th. Dr. S. B. Malone, Sandersville, who has just returned from Europe, where he visited clinics in the principal cities of Europe and London made a report of his observations and existing conditions in European clinics.

Dr. C. E. Lawrence announces the removal of his office to 421 Candler Building, Atlanta.

Dr. William Gerry Morgan, Washington, D. C., President of the American Medical Association, delivered an address before the opening session of the International Conference and Exposition of the American Bakers Association, at Atlantic City, on September 22nd, on "Some Facts About Fads".

The Atlanta Tuberculosis Association will hold its regular meeting at 286 Forrest Avenue, N.E., Atlanta, on the evening of October 23rd.

The Floyd County Medical Society met at the Armstrong Hotel, Rome, on September 19th.

The Sumter County Medical Society held its regular monthly meeting at Americus on September 18th. Dr. E. B. Anderson, Americus, read a paper entitled "Chronic Acetanilid Intoxication—Case Report"; Dr. R. C. Pendergrass, Americus, "Chronic Myeloid Leukemia, Diagnosis and Treatment—Case Reports"; Dr. Arthur C. Primrose, Americus, "Avertin—A Rectal Anesthetic."

The Burke County Medical Society met at the office of Dr. R. L. Miller, Waynesboro, on October 2nd. All members of the society were invited to give case reports. Dinner was served at the Anthony Wayne Hotel.

The Standards for Maternity Care which have been prepared by the Committee on Maternity Care of the Children's Welfare Federation in conjunction with a committee appointed by the New York Obstetrical Society, represent group thinking along lines of adequate care for maternity patients. Careful observation of procedures and problems in a selected group of hospitals and agencies giving maternity care was made by Marian H. Douglas, R. N., Secretary of the Committee on Maternity Care and tentative outlines were prepared. These outlines were submitted to and discussed with representative groups and individual members of the fifty-one hospitals and agencies represented on the Committee on Maternity Care, of which Hazel Corbin, R. N., is Chairman. They were also The work will be in charge of members of the society and for the purpose of diagnosis only.

submitted to the committee appointed by the New York Obstetrical Society, composed of Dr. Ralph W. Lobenstine, Chairman; Dr. George W. Kosmak, and Dr. O. Paul Humpstone, which met with the Chairman and Secretary at regular intervals to advise and to approve the Standards. The suggestions and corrections of these groups were incorporated in the Standards. Continuity of service to the patient is the keynote emphasized in the Standards. Content of service, qualification, and responsibility of personnel are equally stressed. The report includes Prenatal Care, adequate Delivery Service, After Care Qualifications, and Responsibilities of Personnel; Space, Equipment, and Facilities, and Suggested Record Forms. Copies of the Standards may be secured from the Children's Welfare Federation, 244 Madison Avenue, New York City.

Dr. Clifton G. Kemper announces the removal of his office to 105 Forrest Avenue, N.E., 209 Physicians Building, Atlanta.

### MEDICAL ASSOCIATION OF GEORGIA

OFFICE, ATLANTA, GA.

#### Financial Statement\*

Balance in bank May 1, 1929	\$3,667.47	
Total receipts from all sources	16,742.77	
Total to be accounted for	\$20,410.24	
Balance in bank May 1, 1930	\$5,193.13	
Total expenditures from May 1, 1929, to April 30, 1930	15,217.11	\$20,410.24
DISBURSEMENTS		
May 1, 1929, to April 30, 1930		
No.	Description	Amount
1149	Dr. Frank K. Boland: Cut from portrait of Dr. Abner Wellborn Calhoun, purchased by Dr. Boland from Surgery, Gynecology and Obstetrics at one-half original cost	\$ 7.74
1189	Wolverine Art Shops: 550 badges for the annual session of the Association, Macon, May 8, 9, 10, 1929	43.70
1190	Alliance Printing Co.: Printing and mailing 2,075 copies of the April, 1929, issue of THE JOURNAL	438.25
1191	Allen H. Bunce, M.D.: Salary for April, 1929, as Secretary-Treasurer	150.00
1192	H. L. Rowe: Salary as Executive Secretary for April, 1929	175.00

1193	Western Union Telegraph Co.: Telegrams sent to officers of district societies in reference to conference on health and industry held at Macon, March 6, 1929	5.20
1194	A. S. M. Coleman: Expenses as Councilor to May 1, 1929	30.00
1195	Chas. W. Stroberg: Painting nine signs for use at the annual session of the Association, Macon, May 8, 9, 10, 1929	15.75
1196	Chas. W. Stroberg: Painting signs for scientific exhibitors	11.00
1197	Edwin C. Vandegriff: Beaver board and building paper for scientific exhibitors, Macon, 1929, session	\$67.25
	Decorations in hall	10.00
	Labor installing beaver board and decorations	20.00
	Electrician's time and material	20.00
	Labor dismantling	10.00
	Rent on 70 tables for four days	70.00
		197.25
1198	Miss Lila Lumpkin: Four days' work at registration desk during the 1929 annual session of Association	16.00
1199	W. P. Bennett: Watching at auditorium for four nights during 1929 annual session of Association at Macon	12.00
1200	Mrs. Irene H. Snyder: Payment on account for reporting 1929 annual session of the Association at Macon, May 7, 8, 9, 10, 1929	100.00
1201	Dr. Leora G. Bowers: Expenses from and return to Dayton, Ohio, invited guest of the Association, annual session, Macon, May 8, 9, 10, 1929	70.00
1202	Hotel Dempsey, Macon: Expenses at Macon for Dr. L. G. Bowers, Dayton, Ohio, invited guest. \$15.10 Expenses at Macon for Dr. Morris Fishbein, Chicago, Ill., invited guest	14.67
		29.77
1203	Cash: Transferring supplies for annual session of the Association at Macon, 1929, help for commercial and scientific exhibitors and wire to South Carolina Medical Association	18.87

\*Summary of financial statement and report of Secretary-Treasurer was published on pages 336-7 of the August issue of the Journal.

1204—H. L. Rowe:			Postage for mailing JOURNAL .....	25.00
Transportation and meals attending the annual session of the Association at Macon, May 8, 9, 10, 1929 .....	12.85		1222—Southern Engraving Co.:	
1205—Auld's, Inc., Columbus, Ohio:			Cuts for illustrations, invoice 4206 .....	12.47
"Badge of Service" for President, 1928-9 .....	3.34		1223—E. K. Large, Postmaster:	
1206—Benj. F. Stovall:			Postage .....	30.00
Multigraphing notices to secretaries of county societies in reference to delegates, news items mailed to papers in the State, and letters to delegates in reference to the first meeting of the House of Delegates .....	8.80		1224—Western Union Telegraph Co.:	
1207—Lester Book & Stationery Co.:			Telegraph account for May, 1929 .....	12.75
Erasers, Gem clips, paste and paper .....	3.80		1225—Bryan & Middlebrooks, Attys.:	
1208—Southern Press Clipping Bureau:			Attorney's fee for Rosser & Shaw, Attys., LaFayette, representing Dr. D. G. Elder in suit of Clifford Worley and Mrs. Loma Worley vs. Dr. D. G. Elder. ....	100.00
News clippings for April, 1929 .....	5.00		1226—Mrs. Irene H. Snyder:	
1209—Atlanta Envelope Co.:			Balance on account for reporting and furnishing transcript with carbon copies of proceedings of the eightieth annual session of the Association, Macon, May 8, 9, 10, 1929; proceedings of the House of Delegates and minutes of the Council .....	355.86
15,000 number 10 envelopes .....	43.84		1227—J. N. Reisman:	
1210—Banner Press:			Rent for June, 1929 .....	21.50
Cards for acknowledgment of reprints .....	63.75		1228—Southern Press Clipping Bureau:	
1211—Southern Engraving Co.:			News clippings for May, 1929 .....	5.00
Copper cuts for illustrations, invoices 3968-4043 .....	32.31		1229—Benj. F. Stovall:	
1212—J. N. Reisman:			Multigraphing cards sent to delinquent members, letters for Dr. Dancy mailed to presidents of county societies, and letters for Committee on Public Policy and Legislation mailed to secretaries of county societies in reference to Basic Science bill .....	7.15
Rent for May, 1929 .....	21.50		1230—Wrigley Engraving Co.:	
1213—E. K. Large, Postmaster:			Mortising and mounting electros for advertisers .....	5.25
Postage .....	30.00		1231—Miss Annie Jacks:	
1214—Dr. Grady N. Coker:			Commission on advertising of Eager & Simpson .....	6.25
Expenses incurred as secretary for Committee on Hospitals, stationery, cards, postage and stenographer for 1928-9 .....	20.21		1232—E. C. Thrash, M.D.:	
1215—Underwood Typewriter Co.:			Payment on expenses to Portland, Ore., to represent the Association as a delegate in the eightieth annual session of the American Medical Association, July 8 to 12, 1929 .....	300.00
Repairing typewriter .....	13.90		1233—Wm. H. Myers, M.D.:	
1216—M. M. McCord, M.D.:			Payment on expenses to Portland, Ore., to represent the Association as a delegate in the eightieth annual session of the American Medical Association, July 8 to 12, 1929 .....	300.00
Expenses incurred as Councilor for the Seventh District from October, 1928, to May 18, 1929 .....	20.40		1234—Allen H. Bunce, M.D.:	
1217—M. Fishbein, Jr., Memorial Fund:			Payment on expenses to Portland, Ore., to represent the Association as a delegate in the eightieth annual session of the American	
Memorial Fund for Morris Fishbein, Jr. ....	50.00			
1218—Allen H. Bunce, M.D.:				
Salary as Secretary-Treasurer for May, 1929 .....	150.00			
1219—H. L. Rowe:				
Salary as Executive Secretary for May, 1929 .....	175.00			
1220—Alliance Printing Co.:				
Printing and mailing 2,100 copies of the May, 1929, issue of THE JOURNAL .....	\$439.60			
700 programs for eightieth annual session .....	82.50			
Press copies of Dr. Fishbein's paper .....	8.00	530.10		
1221—E. K. Large, Postmaster:				



Medical Association, July 8 to 12, 1929	300.00	1254—E. K. Large, Postmaster:	
1235—J. C. Bennett, M.D.:		Postage for mailing JOURNAL	25.00
Refund of dues paid by Dr. O. E. Shankle. Commerce, his check returned unpaid after his death, payment refused by his executor	5.00	1255—Wm. R. Dancy, M.D.:	
1236—Outstanding.		Expenses incurred to July 27, 1929, as President of the Association, hotels, transportation, telegrams, stationery and postage	115.14
1237—Voided: attached hereto.		1256—Wm. R. Dancy, M.D.:	
1238—E. K. Large, Postmaster:		Stenographic help and postage used in duties as President of the Association	27.00
Postage	30.00	1257—Alliance Printing Co.:	
1239—Alliance Printing Co.:		Printing and mailing 2,100 copies of the July, 1929, issue of THE JOURNAL	439.50
Printing and mailing 2,100 copies of the June, 1929, issue of THE JOURNAL	439.50	1258—Allen H. Bunce, M.D.:	
1240—Allen H. Bunce, M.D.:		Salary as Secretary-Treasurer for July, 1929	150.00
Salary as Secretary-Treasurer for June, 1929	150.00	1259—H. L. Rowe:	
1241—H. L. Rowe:		Salary as Executive Secretary for July, 1929	175.00
Salary as Executive Secretary for June, 1929	175.00	1260—Wm. H. Myers, M.D.:	
1242—The A. W. Calhoun Medical Library:		Expenses as Councilor to August 3, 1929	27.00
Expenses incurred in packing exhibit of Package Library Service for display at the annual session of the Association, Macon, 1929	2.50	1261—J. N. Reisman:	
1243—Atlanta Envelope Co.:		Rent for August, 1929	21.50
10,000 envelopes and 10,000 letterheads for officers and committees for fiscal year 1929-30	82.16	1262—Southern Press Clipping Bureau:	
1244—Benj. F. Stovall:		News clippings for July, 1929	5.00
Letters in reference to stenographic copies of discussion at annual session of Association and cards for mailing to delinquent members	6.95	1263—E. K. Large, Postmaster:	
1245—J. N. Reisman:		Postage	30.00
Rent for July, 1929	21.50	1264—Alliance Printing Co.:	
1246—J. P. Stevens Engraving Co.:		Printing and mailing 2,100 copies of the Augusta, 1929, issue of THE JOURNAL	445.25
2,500 envelopes, 2,500 letterheads for Dr. Dancy, President of the Association	59.55	1265—Allen H. Bunce, M.D.:	
1247—Southern Engraving Co.:		Salary as Secretary-Treasurer for August, 1929	150.00
Cuts for illustrations, invoices 4397-8	42.63	1266—H. L. Rowe:	
1248—Lester Book & Stationery Co.:		Salary as Executive Secretary for August, 1929	175.00
Paper, pencils, pens, typewriter ribbon and twine	6.70	1267—American Medical Association:	
1249—Addressograph Sales Agency:		Copy of the eleventh edition of the American Medical Directory	12.00
Addressograph rib. and changing	2.08	1268—Southern Engraving Co.:	
1250—Southern Press Clipping Bureau:		Cuts for illustrations, invoices 4690-4746-7; Dr. Wm. S. Baer et al.	73.95
News clippings for June, 1929	5.00	1269—J. N. Reisman:	
1251—Miss Annie Jacks:		Rent for September, 1929	21.50
Commission on ad for Southeastern Sanatorium for six months	8.25	1270—Benj. F. Stovall:	
1252—G. Y. Moore, M.D.:		Furnishing stock and multigraphing cards for mailing to delinquent members	5.50
Expenses as Councilor for Third District	35.50	1271—Alliance Printing Co.:	
1253—S. J. Lewis, M.D.:		3,000 envelopes and 3,000 letterheads for Associate Editors	37.25
Expenses as Councilor to July 18, 1929	20.00	1272—Lester Book & Stationery Co.:	
		Index cards, rubber bands and Gem clips	2.25

1273—Southern Press Clipping Bureau: News clippings for August, 1929	5.00	1294—Alliance Printing Co.: Printing and mailing 2,100 copies of the No- vember, 1929, issue of THE JOURNAL	\$446.50
1274—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for September, 1929	150.00	2,000 membership cards for 1930	16.00
1275—H. L. Rowe: Salary as Executive Secretary for September, 1929	175.00	2,100 notices to mem- bers in reference to dues for 1930	8.75
1276—Alliance Printing Co.: Printing and mailing 2,100 copies of the September, 1929, issue of THE JOURNAL	442.00	1295—American Medical Association: Four books for Associate Editors	6.00
1277—E. K. Large, Postmaster: Postage	30.00	1296—William R. Dancy, M.D.: Stenographic work	15.00
1278—C. L. Ayers, M.D.: Expenses incurred as Councilor to October 4, 1929	26.50	1297—Alliance Printing Co.: Printing and mailing 2,100 copies of the December, 1929, issue of THE JOURNAL	442.05
1279—E. K. Large, Postmaster: Postage for mailing THE JOURNAL	25.00	1298—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for December, 1929	150.00
1280—William R. Dancy, M.D.: Expenses incurred as President, traveling, telephone and telegraph accounts and postage	134.86	1299—H. L. Rowe: Salary as Executive Secretary for December, 1929	175.00
1281—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for October, 1929	150.00	1300—E. K. Large, Postmaster: Postage for mailing THE JOURNAL	25.00
1282—H. L. Rowe: Salary as Executive Secretary for October, 1929	175.00	1301—Atlanta Envelope Co.: 25,500 envelopes for mailing THE JOURNAL	128.52
1283—Alliance Printing Co.: Printing and mailing 2,100 copies of the October, 1929, issue of THE JOURNAL	442.25	1302—J. N. Reisman: Rent for December, 1929, and January, 1930	43.00
1284—Southern Press Clipping Bureau: News clippings for September and October, 1929	10.00	1303—Southern Press Clipping Bureau: News clippings for November and December, 1929	10.00
1285—J. N. Reisman: Rent for October and November, 1929	43.00	1304—Southern Engraving Co.: Cuts for illustrations, invoices 157-435-6	28.40
1286—Benj. F. Stovall: Multigraphing	7.65	1305—Benj. F. Stovall: Multigraphing letters to county secretaries and enclosing blanks for reporting the payment of dues, let- ters in reference to proofs for Di- rectory issue of THE JOURNAL, and letters in reference to Health Education Week	7.50
1287—Southern Engraving Co.: Cuts for illustrations	20.53	1306—Lester Book & Stationery Co.: Typewriter ribbon	.75
1288—Lester Book & Stationery Co.: Journal for registering members for 1930, pencils, index tabs, typewriter ribbon and paper, 5,000 second sheets	14.15	1307—West View Florist: Flowers expressed to Athens for Mrs. Taylor, daughter of Dr. Crawford W. Long, ordered by Dr. Frank K. Boland	10.50
1289—E. K. Large, Postmaster: Postage	30.00	1308—Bryan & Middlebrooks, Attys.: Cost of taking depositions by C. D. McCorkle, Court Reporter, in suit of Dr. G. T. Alexander vs. H. A. Turner; depositions of Drs. Wm. F. Lake and L. C. Fischer	5.40
1290—Southern Bell T. & T. Co.: Telephone and Telegraph accounts for August, September, and Octo- ber, 1929	7.09		
1291—H. L. Rowe: Salary as Executive Secretary for November, 1929	175.00		
1292—E. K. Large, Postmaster: Postage	30.00		
1293—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for November, 1929	150.00		

1309—E. K. Large, Postmaster: Postage .....	30.00	mittee on Public Policy and Leg- islation .....	30.00
1310—Miss Ethlene Hale: Special stenographic work .....	6.60	1328—Southern Blue Print Co.: 3 negatives and 3 photo- stats: re cancer .....	\$4.50
1311—William R. Dancy, M.D.: Expenses incurred as President of the Association from November, 1929, to January 22, 1930 .....	163.16	100 blue prints of floor space in Partridge Inn, Augusta, for commercial exhibits during the an- nual session of the As- sociation, May 13, 14, 15, 16, 1930 .....	14.00
1312—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for January, 1930 .....	150.00	1329—Southern Engraving Co.: Cut for illustration, invoice 635 .....	4.02
1313—H. L. Rowe: Salary as Executive Secretary for January, 1930 .....	175.00	1330—Massachusetts Bonding & Insurance Co.: Premium on surety bond for Secretary-Treasurer, No. R-2247- 30, for one year to April 1, 1931 .....	7.50
1314—Alliance Printing Co.: Printing and mailing 2,100 copies of the January, 1930, issue of THE JOURNAL .....	\$398.00	1331—Cotton States Electric Co.: Repairing house phone .....	1.65
2,000 copies third edi- tion Radio Waves .....	12.00	1332—J. N. Reisman: Rent for March, 1930 .....	21.50
2,000 cards, Health Ed- ucation Week .....	7.50	1333—E. K. Large, Postmaster: Postage .....	30.00
5,000 cards, Advertising .....	12.75	1334—Miss Annie Jacks: Commission on advertising of Pedigree Dairies, Inc., and South- eastern Sanatorium .....	43.50
1315—Bryan & Middlebrooks, Attys.: Retainer as attorneys for the Association .....	1,250.00	1335—Miss Jessie Stewart: Salary as stenographer for Com- mittee on Public Policy and Leg- islation; Office State Board of Health, March 10 to 15, 1930 ..	13.35
1316—Addressograph Co.: Ribbon for Addressograph .....	2.45	1336—William R. Dancy, M.D.: Expense account for March, 1930 ..	67.24
1317—American Medical Editors' and Authors' Association, dues and subscription .....	5.00	1337—E. K. Large, Postmaster: Postage for Committee on Health Education Week for Committee on Public Policy and Legislation...	10.00
1318—J. N. Reisman: Rent for February, 1930 .....	21.50	1338—Bryan & Middlebrooks, Attys.: Expenses to Waycross and return attending court in the suit of Mrs. Mattie Evans vs. Dr. C. M. Stephens .....	30.08
1319—Southern Press Clipping Bureau: News clippings for January, 1930 ..	5.00	1339—William R. Dancy, M.D.: Expenses as President for Febru- ary, 1930 .....	10.50
1320—Benj. F. Stovall: Multigraphing letters to hospitals in reference to advertising, letters for Dr. Glenville Giddings and to chairmen of committees in refer- ence to Health Education Week ..	7.75	1340—William R. Dancy, M.D.: Stenographic work and postage for mailing letters to the Councilors and Secretaries of county societies ..	22.50
1321—Lester Book & Stationery Co.: Paper, twine, paste, pencils, rub- ber bands and clips .....	8.00	1341—Miss Jessie Stewart: Salary as stenographer for Com- mittee on Public Policy and Leg- islation from March 15 to April 1, 1930; Offices State Board of Health .....	37.50
1322—E. K. Large, Postmaster: Postage .....	30.00	1342—Miss Mary Lou Keese: Salary as stenographer for the Committee on Public Policy and Legislation, March 25 to April 1,	
1323—Alliance Printing Co.: Printing and mailing 2,100 copies of the February, 1930, issue of THE JOURNAL, and reprints for Health Education Week .....	400.00		
1324—E. K. Large, Postmaster: Postage for mailing THE JOURNAL ..	25.00		
1325—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for February, 1930 .....	150.00		
1326—H. L. Rowe: Salary as Executive Secretary for February, 1930 .....	175.00		
1327—E. K. Large, Postmaster: Deposit for postage for the Com-			



1930; Offices State Board of Health .....	15.00	1358—Miss Jessie Stewart:	
1343—Allen H. Bunce, M.D.:		Salary as stenographer for Committee on Public Policy and Legislation at offices State Board of Health .....	37.50
Salary as Secretary-Treasurer for March, 1930 .....	150.00		
1344—H. L. Rowe:		1359—Miss Annie Jacks:	
Salary as Executive Secretary for March, 1930 .....	175.00	Commission on advertising of Stone Mountain Sanatorium .....	27.00
1345—Alliance Printing Co.:		1360—Southern Bell T. & T. Co.:	
Printing and mailing 2,100 copies of the March, 1930, issue of THE JOURNAL .....	408.00	Advance payment for telephone installed in office .....	6.00
1346—E. K. Large, Postmaster:		Jan. 22, 1930—Check on Dr. J. M. Rogers returned unpaid, insufficient funds and paid later .....	35.00
Postage .....	30.00	Jan. 30, 1930—Check on Dr. John A. Rhodes returned; bank closed .....	7.00
1347—William R. Dancy, M.D.:		April 17, 1930—Check on Dr. J. C. Bennett returned unpaid; insufficient funds and paid later .....	7.00
Postage and mimeographing letters sent to members in the Fourth District .....	4.96	April 19, 1930—Check on Dr. W. E. Simmons charged back; bank closed .....	30.00
1348—Miss Mary Lou Keese:		April 30, 1930—Fulton National Bank, Atlanta, Ga.; exchange charges for fiscal year .....	12.25
Stenographic work for the Committee on Public Policy and Legislation, April 1 to 8, 1930 .....	15.00	Total .....	\$15,217.11
1349—Lester Book & Stationery Co.:			
T. W. Ribbon, paper, pencils, paste and carbon .....	4.75		
1350—Southern Press Clipping Bureau:			
News clippings for February and March, 1930 .....	10.00		
1351—Addressograph Sales Agency:			
500 alloy plates and ribbon .....	2.60		
1352—J. N. Reisman:			
Rent for April, 1930 .....	21.50		
1353—Benj. F. Stovall:			
Multigraphing letters in reference to Commercial and Scientific exhibits, for Committee on Public Policy and Legislation, delegates, Committee on History, delinquent members, Porter Narcotic bills, members of the Coweta County Medical Society, and to doctors on program .....	24.00		
1354—A. B. Dick Company:			
Special paper delivered to the offices of the State Board of Health for the Committee on Public Policy and Legislation .....	10.80		
1355—Underwood Typewriter Co.:			
Rent of machine for one month to April 26, 1930, for Committee on Public Policy and Legislation .....	5.00		
1356—Carithers-Wallace-Courtenay:			
200 Y & E Vertical folders delivered at offices of the State Board of Health for Committee on Public Policy and Legislation .....	3.80		
1357—The Whitaker Paper Co.:			
Envelopes and paper delivered at offices of State Board of Health for Committee on Public Policy and Legislation .....	11.88		

## OBITUARY

*Dr. Benjamin Rosenbloom*, Atlanta; Atlanta School of Medicine, 1911; aged 45; died at a private sanitarium on July 29, 1930. He was a native of New York and came to Atlanta in 1907. He was a member of F. & A. M., Scottish Rite Masons and the Jewish Synagogue. Surviving him are his mother and one sister, Mrs. Harry Davis of New York City. Funeral arrangements were in charge of Sam R. Greenberg & Company.

*Dr. John A. Hunnicutt, Sr.*, Athens: Atlanta Medical College, 1866; aged 92; died at his home 325 Milledge Avenue, Athens, August 10, 1930. He was distinguished as being Athens' first citizen emeritus. Dr. Hunnicutt served as mayor of Athens, director of the Southern Mutual Insurance Company, president of the Athens Savings Bank, and trustee of Lucy Cobb Institute. He served as a steward in the First Methodist church since it was established and was an ardent church worker. Surviving him are his widow, seven daughters, Mrs. R. W. Syprian, Mrs. C. P. Wilcox, Mrs. Stiles Hopkins, all of Atlanta; Mrs. E. J. Bailey, Raymond; Misses Mary and Sarah Hunnicutt, and Mrs. Chas. G. Eckford, all of Athens; two sons, Deupree and Dr. John A. Hunnicutt, both of Athens. Funeral services were conducted from the residence by Dr. Elam Dempsey and Dr. Lester Rumble, and interment was in the Oconee cemetery.

*Dr. John W. Ragsdale*, Smithville: Georgia College Eclectic Medicine and Surgery, 1913; aged 44; died at a local hospital on August 13, 1930. He was a member of the Baptist church. Dr. Ragsdale had practiced in Smithville and surrounding community for a number of years. He was well known and held in high esteem. Surviving him are his mother, Mrs. L. A. Ragsdale, Gainesville, Fla.; three sisters, Mrs. B. A. Cole, Atlanta; Mrs. J. M. Price, Toccoa; and Mrs. L. L. King, Gainesville, Fla. Four brothers, L. P. and G. W. Ragsdale, Washington, D. C.; E. L. and C. C. Ragsdale, Atlanta.

*Dr. W. M. Curtis*, Calhoun; Atlanta College of Physicians and Surgeons, 1875; aged 83; died at his home on September 30, 1930. For thirty-five years he was a resident of Atlanta where he was widely known as a physician. He was a veteran of the War Between the States and a member of the Odd Fellows and Baptist church. Surviving him are his widow, three daughters, Mrs. H. A. Wise and Miss Willie Mae Curtis of Calhoun, and Mrs. A. S. Knight, West Palm Beach, Florida; three sons, Dr. A. L. Curtis, Atlanta; D. C. Curtis, Atlanta; and H. C. Curtis, Knoxville, Tennessee. Funeral services were conducted from the residence and interment in the family cemetery near Calhoun.

#### LUNG ABSCESSSES

H. L. Spector, St. Louis (*Journal A. M. A.*, Sept. 13, 1930), asserts that all acute lung abscesses are primarily medical. Acute single lung abscesses and some chronic abscesses are usually amenable to medical treatment alone. Radical surgery is definitely indicated only in cases in which the patient does not get well after a reasonable period of conservative "management," in peripheral abscesses that do not drain well, in long standing chronic cases, or, occasionally, in multiple abscesses limited to one lobe. Bilateral multiple abscesses a virulent condition running a rather brief and stormy course leading to a fatal termination.

**WANTED**—Physician, 32 years of age, married, graduate of Heidelberg, Germany, five years in general practice. At present Assistant Superintendent and Resident Physician of a State Tuberculosis Sanatorium. Does surgery and pneumothorax. Would like change in position, if possible with two-year contract. First-class references. Can accept position in fifteen days. Address "E", Care The Journal.

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## VASOMOTOR RHINITIS\*

ARTHUR G. FORT, M.D.  
*Atlanta*

This name, vasomotor rhinitis, gives the impression that the disease is purely a reflex symptom. That may be true in the beginning, but later there is definite pathology, a true hyperplasia. Vasomotor rhinitis is that condition of the turbinates where bogginess is constant, obstruction persistent, mucous discharge almost continuous, prolonged sneezing frequent, not seasonal.

During the past three years I have seen many cases and am led to believe it is on the increase. Many of these cases present themselves for treatment with the belief they have hay-fever and, because the symptoms do not abate, become alarmed. Examination reveals a pale grayish "water-logged" edematous mucous membrane of the turbinates, much mucous and obstruction. When the boggy mucous membrane is pressed on there is a depression, a pitting, which gradually refills. Examination of the discharge shows the presence of mucous which at once distinguishes it from cerebro-spinal rhinorrhoea. Eosinophils are present in varying percentages.

The complications are sinusitis, with its symptoms of headache and malaise. This is usually catarrhal in type, but may be purulent; polyps are often present and are usually associated with the purulent type.

Many causes are given and it is a striking fact that in a large per cent of cases it is said that this condition followed influenza. The impressions I have gained are that we might class them as follows:

(1) *Allergic*: Here we have an eosinophilia, as found in asthma, vernal conjunc-

tivitis and hay-fever. The offending substances must be something ever present as dandruff, feathers, etc., or otherwise it would be seasonal.

(2) *Bacterial*: These are the cases giving history of influenza as an exciting cause and in these we often find evidence of chronic sinusitis, with polypi present.

(3) *Deficiency in the Chemical Constituents of the Blood*: In this it is like asthma. The calcium content of the blood is usually low.

(4) *Intestinal Putrefaction*.

Most of the articles presented recently delve deeply into the pathology of the disease and leave it with that, but busy men are interested more in the relief of their patients than in the theories of the causes and the pathology present. With this statement, I trust you will pardon me for taking more time with the phase of treatment than with the pathology.

Treatment is directed to the cause and the effect: (1) In allergic cases we seek to find the offending substance and begin desensitization. If, perchance, it is feathers, usually it is from feather pillows and we use cotton. As the constant blocking of the nares tends to increase the tendency to sinusitis, we shrink up the nasal mucosa, using a weak solution of cocaine and then applying cotton packs saturated with a fresh 20 per cent solution of an organic salt of silver and, to those who are not sensitive to epinephrine or ephedrine, I give a spray containing one of these drugs, together with neo-silvol, drams one to an ounce.

The bacterial group are treated by elimination of foci of infection and administration of vaccines. Usually the stock vaccine containing mixed staphylococci and streptococci is efficient. The same local treatment is given as above outlined.

\*Read before the Medical Association of Georgia, Augusta, Ga., May 15, 1930.



When deficiency in calcium is found, the administration of this drug, together with very small doses of thyroid, gives wonderful relief. A few of the cases I have seen were caused by tobacco. This group I class under the heading of blood chemistry, and for treatment I recommend sweat-baths after proper examination of the heart. The patients are greatly helped. If this local treatment does not afford relief I try, first, zinc ionization, and then later cauterization. When confronted with intestinal putrefaction as a cause, I prescribe colonic irrigations, diet, and exercise.

Cocanization of the nasal ganglia often gives temporary relief, but it is only temporary. Some follow this with nitrate of silver, but my experience is that it is of doubtful value.

Associated with any of the above you often find some abnormality in the nose, such as badly deflected nasal septum, purulent sinusitis, or polypoid degeneration. Except in the presence of polyps, operative procedures are not called for until the symptoms have abated. After amelioration of symptoms, we can resort to surgical intervention, but with doubtful results. Radium is used when polyps are removed, but symptoms persist. We give 100 millicure hours to each side and repeat if necessary.

#### Summary

1. Vasomotor rhinitis is a fairly common disease.
2. It is similar to hay-fever, vernal conjunctivitis, and other allergic diseases.
3. Deficiency in blood chemistry is frequently found.
4. Local and systemic treatment should be given simultaneously.
5. Operations, except in presence of polyps, are particularly disappointing during the acute condition.
6. Operative procedure, when indicated, should be resorted to during the quiescent stage, but too flattering results should not be expected.
7. Radium should be used particularly when polyps are removed.

#### DISCUSSION ON PAPER OF DR. FORT

**Dr. George H. Lang,** Savannah, Ga.—Vasomotor rhinitis is a nasal disturbance that has been known for many years. It was not, however, until 1819 that a physician named Bostock, a victim of this disturbance himself, reported it in detail. Up to that time very little attention had been paid to the condition but since then a tremendous literature has been developed. The condition is wide spread and always excites more or less interest.

Dr. Fort, for the reasons stated in his paper, emphasized the treatment of the condition. I wish he had included an emphasis on the etiological factors that produce it, for until we are able to put our finger on the particular cause, (and the causes are legion), we are not in a position to do a great deal for permanent relief of our patients. I am sure Dr. Fort has had in his practice many cases which have been investigated from the allergic standpoint, from the bacteriological, from the intestinal putrefactive standpoint, which have shown nothing but the patients continue to have disturbance. Some of these cases if further investigated may be explained on the ground of a neurosis. Some have rather a familial tendency, and there are still others in which no cause can be found.

Some years ago I had a patient who was the victim of the disorder in a very exaggerated form. She was miserable and the family was miserable. Finally, after doing everything possible, we advised that she go to New York City to see an eminent immunologist there. After many tests he decided that she was a victim of house dust. She went home and sent him samples of the dust and he got up a vaccine which she took under my supervision. I gave her series after series of this without very much effect, relieving in the meantime her symptoms with local treatment of the nose. About two years ago that patient developed symptoms which indicated gall-bladder disturbance. Her surgeon advised an operation and after removal of the gall-bladder the vasomotor rhinitis disappeared.

Another patient who suffered almost as badly as this one was sent to the same man in New York City. He could find nothing. She then went to Boston and consulted a man there. He could do nothing and she returned home where I did the best I could for her. She became pregnant and since the arrival of the baby has had no more vasomotor rhinitis.

Another patient with the same sort of history came in one day to tell me she had no more trouble with her nose. I asked her what she did and she told me that it had become necessary for them to cut down a chinaberry tree in the yard and the next morning she breathed freely and had had no trouble since.

These are but a few examples which illustrate the complexness of the etiology and at the same time stress the importance of finding the cause if we would help the patient.

**Dr. Thomas R. Gaines,** Anderson, S. C.—In my files I have a different file for everything connected with ear, nose and throat work, and keep clippings

on all interesting things. I have a file on hyperesthetic rhinitis, another on vasomotor rhinitis and one on allergy. As we go through the files it is surprising to find the number of articles appearing now, and it is surprising to find the similarity of the three conditions. I classify them all as nasal manifestations of allergy. We are struck by the fact that the man who is reporting the case states that the patient improved, no matter what was done. One man gives calcium and his patient improves. Another man decides that there is an imbalance of the parathyroid and gives parathyroid extract and his patients improve. Another decides that a radical antrum operation is necessary, this is done and his patients get better. Another man does a submucous resection and the patient improves. Another man decides he does not know what the trouble is and gives dilute hydrochloric acid and his patients improve. They all get better for a while, but are seldom cured. This is very interesting to me. I am not offering any theory of my own, but when a patient comes in with a thin, watery discharge, with the turbinate spongy when it is not seasonal for hay fever, if there is any mechanical obstruction it is corrected. If transillumination is negative we have a skiagram made of the sinuses. If that is negative we pass the case on to an internist, requesting sensitization tests for foreign proteins and pollens.

I think Dr. Fort has covered this subject very well, and I enjoyed his paper to the fullest.

**Dr. George Henry Faggert**, Savannah, Ga. — This is a condition we all have to contend with and I think the majority of us keep these patients on our list constantly. I feel that the condition is an allergic reaction, but in the majority of instances we are unable to determine the factor. It may be mucus retained in the ethmoid or other sinuses, or it may be putrefactive products retained in the intestinal tract. I cannot help feeling that there is a nervous condition at the base of most cases. The majority of patients I come in contact with are inside workers, professional men, school teachers, stenographers, and that type of individual.

I have been in the habit of using the term "hyperesthetic rhinitis" for I feel that in the majority of cases if we see them in the early acute condition we have to make the diagnosis on the fact that in the history it is stated that there is an alternating obstruction of the nares. This usually occurs at night and as the patient turns from one side to the other as the obstruction goes from one side to the other. There are changes in the nose and also in the pharynx and up in the ear, where the drum may be of a dusky hue and it is hard to determine whether we are dealing with a low grade infection in the ear or a hyperesthetic condition. I find that atropine in large doses given over a short period of time seems to relieve these patients. I like ephedrin; if you give it to the patient to apply in an oily solution. I think the patient gets along better if it is applied with a medicine dropper when in the reclining position. I try to teach the patient who has a bad case to use an applicator, for I think much less of the ephedrin can be used in that way and better results be obtained.

I do not remember hearing anything said about calcium administration in these cases. I think if it is administered in large doses, particularly if we give the preparations put up in the least objectional form, giving it between meals, and give some form of vitamin D, whether by sunshine or viosterol or irradiated cod liver oil, these measures are helpful in some cases. I do not know whether this decreases the inflammation of the nose or the nervous irritability, but if combined with the other treatments it seems beneficial. In uncomplicated cases after the acute exacerbation subsides cauterization of the turbinates is the treatment I use. This does not cure the patient, but it gives great relief, and it is possible to control the condition if it recurs with much less effort.

**Dr. Arthur G. Fort**, Atlanta, Ga., (closing). — I wish to thank the gentlemen for their discussion and to state that of all the interesting papers I have read on this subject, the most interesting is the one sent to me by Dr. Gaines, who has had quite a large experience with these cases.

In reference to surgery, I cannot impress too strongly upon the men that if they retain their patients they had better wait until the acute symptoms have subsided before resorting to surgery. I had a patient of this kind who needed a submucous resection very badly. Submucous was done and the patient returned time and again and grew progressively worse. One day I missed her, but soon a new patient came into my office. I looked at her nose and saw that she had had a beautiful submucous resection. She got no better and left her doctor and came to me. I afterward found that my former patient had gone to the doctor who operated on this one. Neither of them got much benefit from the operation.

#### GONORRHEAL SPURS'A MISNOMER

William H. Von Lackum and Emilio J. Palomeque, Rochester, Minn. (*Journal A. M. A.*, August 16, 1930), found that forty-four of 100 consecutive patients with calcaneal spurs gave a history of gonorrhea, and of these 40.8 per cent had definitely infected tonsils, 59 per cent had infected teeth, and 22.2 per cent had definite prostatitis. Fifty-six patients did not give a history of gonorrhea; of these 55.3 per cent had infected teeth, 20 per cent had infected tonsils, and 12.5 per cent had definite prostatitis. Eight patients without gonorrhea and four patients with gonorrhea had osteoarthritis of other joints. Syphilis, so far as could be ascertained, was not an etiologic factor in any of the cases. A variety of etiologic factors for calcaneal spurs have been commented on by various observers. Some factors, previously thought to be of primary importance, do not seem to be significant in the etiology. Neither syphilis nor gonorrhea is a gross factor in the etiology of most cases of calcaneal spurs. Foci of infection in the teeth, tonsils, or prostate gland, and possibly other obscure areas, particularly those bearing streptococci, are probably a large factor in cases in which multiple etiologic factors are present. The term "gonorrheal spurs" is a misnomer and should not be used.

## THE CARE OF EYE INJURIES FROM THE PRACTITIONER'S STANDPOINT\*

WILLIAM O. MARTIN, JR., M.D.

*Atlanta*

The general practitioner should have sufficient knowledge to treat the common eye injuries, as he is sometimes called upon in an emergency. It is not my intention to go into detail or to become too technical in this paper. I merely wish to stress some of the simple forms of treatment and point out certain dangers which may be encountered.

In order that we may have a better understanding of the subject, it might be well to take up very briefly some of the anatomy of the eye. The conjunctiva is a continuous coat forming a sac which covers the inner surface of the lids and the anterior surface of the eyeball. The cornea and sclera form the outer fibrous coat of the eye, the cornea being the anterior portion which is composed of connective tissue stroma with its lamellae arranged in parallel rows making it transparent. The cornea is inserted into the sclera very much like a watch crystal. The sclera is a tough, white coat made up of bundles of connective tissue fibers which run in different directions, thereby making it opaque but more resistant. If the cornea and sclera be removed, we come to the iris, ciliary body, and choroid which are dark brown in color due to their pigment. They form a continuous coat, spherical in shape, with an opening in front called the pupil and one behind for the optic nerve. Because of its similarity to a grape hanging on a stem (the optic nerve), it is called the uvea.

The eye is the most highly developed and most sensitive organ in the body and as such demands careful attention. It must be treated with delicacy and respect.

As a general rule in the early stages of contusions and inflammations cold compresses are advisable, and later, hot ones, but in acute iritis hot ones are used from the beginning. For instillations neo-silvol is, in

my opinion, preferable to argyrol because it does not stain, does not coagulate, forming hard crusts on the lids, and it is much more soothing and just as germicidal. Merurochrome in 1 or 2 per cent solution is good in certain cases. Lid injuries are treated as injuries elsewhere, but care should be taken to preserve the cosmetic appearance and to prevent notching or contractions. The wound edges must be approximated exactly. As a result of burns, cicatricial ectropion (turning out of lids due to scar tissue) sometimes occurs but can often be corrected by the ophthalmic surgeon.

The conjunctiva is subject to chemical burns and lacerations. The lacerations should be cleansed and, if extensive, closed with fine silk sutures. Chemical burns may be due to acids, alkalies, or caustics. Lime burns caused by plaster getting in the eye are often encountered. If possible, instillations of 1 per cent holocain solution or 4 per cent cocaine should be used for anesthesia, then irrigation of the eyes with warm boric solution or warm water to remove all particles of plaster. The upper lid should be everted to inspect the upper cul de sac. It is never advisable to try to neutralize an acid burn by instilling an alkali or vice versa. The damage has already been done. In phenol or iodine burns alcohol may be applied to the burned area if seen immediately afterwards. After irrigating the eyes until none of the offending agent is left, atropine 1 per cent should be instilled, provided the intraocular tension is normal, then the eye filled with 1 per cent holocain ointment and a patch applied to keep it closed. Castor oil, vaseline, or boric ointment may be used if holocain ointment is not available. Holocain acts as an analgesic and is said to aid in regeneration of the corneal epithelium, whereas cocaine tends to destroy it. The ointment should be used at frequent intervals during the day to prevent adhesions from forming and also to relieve pain, and a patch should be used between times to keep the eye closed.

Cold compresses may be used to allay the swelling and, if infection is present, 20 per cent neo-silvol or 1 per cent merurochrome may be instilled every three or four hours.

\*Read before the Medical Association of Georgia, Augusta, Ga., May 15, 1930.



To determine the part of the conjunctiva or cornea burned, a drop of 1 per cent mercurochrome will stain the burned area much darker. The progress of the condition may be thus determined. When healing has been complete, instillations of a solution containing one-half grain zinc sulphate and ten grains boric acid to an ounce of water may be used several times a day for a week or two.

The cornea is the seat of many injuries, most of which are due to foreign bodies. When these are embedded, it is useless to try to wipe them off because this will embed them deeper and abrade the epithelium, thus offering a good chance for infection and ulceration. Four per cent cocaine or one per cent holocain should be instilled to anesthetize the eye and then with a sharp pointed instrument, preferably a spud, the foreign body can be picked out. It is better to stand behind the patient because if he moves there will be less danger of injuring the eye, and he is less likely to be nervous. Silver nitrate 1 per cent should be applied to the lower lid to prevent infection and the eye filled with borated vaseline, and the eye closed with a patch for twenty-four hours to allow the epithelium to regenerate. Powder burns may be treated in the same manner as other foreign bodies. It is advisable to remove only a few of the particles at a time, allowing some to be absorbed or to soften. Tetanus antitoxin should be given in all cases of powder burns.

As a result of foreign bodies, an ulcer of the cornea may form with pus in the anterior chamber. This is a serious condition and demands immediate and energetic treatment by an oculist to try to save the eye. If one is not available, the ulcer should be cauterized with 95 per cent phenol, followed by alcohol, hot bathing, and atropine and daily injections of foreign proteins.

Electric ophthalmia comes on several hours after exposure to bright lights or ultra violet rays. It is accompanied by severe pain, blepharospasm and photophobia. Cold compresses, adrenalin, and holocain ointment give relief.

Perforating wounds of the cornea require

treatment according to the condition found. If the iris is caught in the wound, it should be freed if possible; if protruding, it should be cut off and atropine instilled and patch applied. Daily injections of 10 c.c. of boiled milk (Grade B) for three days often prevents serious infections. Hot bathing for twenty minutes followed by 1 per cent atropine should be used four times a day until all signs of inflammation have disappeared. If a cataract forms, the lens has been injured. Swelling of the cataractous lens may take place, giving rise to secondary glaucoma. Following blunt injuries secondary glaucoma may develop, due to a dislocated lens or to an intra-ocular hemorrhage. These cases should be seen by an oculist.

Steel slivers may enter the eye and produce very little pain. If suspected, the eye should be x-rayed and the foreign body, if present, localized and removed with a magnet. Non-magnetic intra-ocular foreign bodies, such as copper and brass, are dangerous and often cannot be removed. The eye may have to be removed to prevent sympathetic disease in the other eye. Foreign bodies in the orbit may not give rise to any trouble and can be left alone.

Scleral wounds near the cornea are dangerous because they may involve the ciliary body. This is the danger zone and such eyes sometimes produce sympathetic ophthalmia if not removed. After sympathetic disease begins it is too late to remove the injured eye. Symptoms of sympathetic ophthalmia are variable and unreliable. Beginning softness, a red inflamed and irritable eye, exudate in the pupillary area, deposits on the posterior surface of the cornea and diminution of vision are suggestive. The other eye first becomes a little irritable and sensitive to light and undergoes the same changes as the exciting eye. The cause of sympathetic ophthalmia is unknown and also the way in which it extends to the opposite eye. Unfortunately we can never say whether an injured eye will produce a sympathetic ophthalmia or not, and it is left to the judgment of the oculist as to the advisability of removing such an eye. Sympathetic disease may come on from

ten days to forty years after injury, and this fact makes it a very hazardous procedure in deciding whether an eye should be removed. Any degenerated, blind eye which becomes inflamed and painful at times is better out. Treatment is of little avail. Remissions often occur, which accounts for some cases being reported as cured, but there is no evidence so far as I can learn that a true case has ever been cured. Foreign proteins, hot bathing, and atropine form the usual line of treatment. Some claim good results with large doses of salicylates and others with arsphe-namine.

I want to take this opportunity to condemn the promiscuous use of atropine. It is the most valuable drug in ophthalmology and also the most dangerous if used indiscriminately. More people have been rendered blind by its use than most of us realize. It is always dangerous in old people, because it may give rise to glaucoma. In many cases of potential glaucoma, atropine has been the exciting cause of an acute attack of glaucoma. It should never be used to dilate the pupils for an ophthalmoscopic examination, because its effects last for a week or longer. Some unfortunately regard atropine as a panacea for all eye ailments.

Conclusion: The treatment of eye injuries is similar to treatment of injuries elsewhere except we are dealing with very delicate structures. With a knowledge of the anatomy of the eye we can treat them much more intelligently and can distinguish between minor and severe injuries. If available, an oculist should be called when in doubt because we have only two eyes and they are precious possessions.

#### DISCUSSION ON PAPER OF DR. MARTIN

*Dr. Thomas R. Gaines*, Anderson, S. C.—One point in particular is to be stressed in Dr. Martin's paper, that is, the danger in the use of atropine by men who are not properly trained in eye work. In fact, it is at times most difficult for an ophthalmologist to decide whether or not its use is indicated. It is surprising to see the number of patients that come in with atropinized eyes, who have never seen a physician. Recently a college student came to see me complaining of inability to do his work due to failing vision. A few days previously he had told a druggist of some lid irritation, and he was sold some ointment containing among other things 1 per cent

atropine. Of course, he had widely dilated pupils and loss of accommodation.

Speaking from the viewpoint of one who has done both general work and ophthalmology, I would say let us continue to emphasize the danger of producing glaucoma, or making a glaucoma worse, by the untimely use of atrophin.

*Dr. Charles C. Hinton*, Macon, Ga.—Just a few words in regard to the use of atropin and the production of general toxic symptoms.

I have had two cases of atropin poisoning from the use of 1 per cent solution in eyes. One man developed acute toxic psychosis and attempted to get a hammer with the expressed intention of killing his entire family. On discontinuing the atropin the mental state cleared up. His wife was instructed to make pressure at the inner canthus for a minute or two with each subsequent use of the eye-drops. This was done for several days with satisfaction but was then discontinued without instructions. In less than forty-eight hours the mental disturbance returned.

I call attention to this simply that the general practitioner may be on guard for such occurrences.

#### KERATOSIS, EPITHELIOMA OR SKIN CANCER\*

J. G. DEAN, M.D.  
*Dawson*

It will be noted at once that the subject I have selected is an old one, but one which has within it the elements of a broad discussion, elements with which the expert, the technician, or the specialist is usually expected to deal, and about which he can tell us much. Of course I lay no claim whatever to the distinction of being other than the ordinary country doctor.

Cancers of every nature constitute a disease which concerns very frequently every doctor, however inconsequential he may regard himself. The greater part of us, possessed of a reasonable amount of thought, preparation and ability not infrequently meet in our practice various forms of cancer with which we may successfully deal, if prompt and competent action be taken. Many of us in the country districts, without hospital advantages, can and should do much to alleviate, and frequently cure this, one of the most dreaded curses which beset mankind.

That which has, most of all, prompted me to undertake this paper is the fact that so few seem to have realized that so much

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can be accomplished, and so cheaply, in the matter of relieving thousands of patients with cancer of the skin. It is of course the rare physician among our ranks who can afford the thousands of dollars essential to provide a supply of radium, which itself is not without danger and not a cure-all for cancer. I do not mean in any sense to underestimate its value. It is a wonderful remedy and has meant much to mankind already, but for the benefit of my fellow country doctors especially, and for those of the city, as well, I shall here outline facts, and try to show just how easily it is to make use of an old and perfectly reliable and easily accessible remedy by any one of us, through the instrumentality of which many a poor man or woman may be saved many dollars, many a sojourn away from home, and be made all the more to appreciate, yea, to reverence the home doctor.

I am dealing with nothing new nor strange, nothing save that with which every one in this presence should have dealt many times, if he has been many years in the practice of medicine. There are many things in our work, as well as in most other callings, which will never grow old and which offer great opportunities for skill in our administration to the diseases of mankind. It is neither my desire nor intention to underestimate any of the newer remedies now so frequently resorted to in the treatment of what may be referred to as "skin cancer". This designation, as every one knows, covers divers things which may lead to such trouble.

A keratosis, moles, chronic ulcers, fissures of the skin, and constant irritation, such as is caused by constantly carrying a pipe in the same side of the mouth, frequently cause epithelioma or skin cancer. Such diseased points as above outlined, especially if they have existed for years, should not be treated lightly. There is no one among us who has not the ability to abort many of these troubles if he will only use his God-given ability to think and make use of a remedy always at hand.

Almost forty years ago, while attending the New York Polyclinic Post Graduate School, and listening to that most delightful and able surgical teacher, the lamented Dr.

John A. Wyeth, I was first made to realize that by the means he described I would be able not only to abort, but to cure perhaps many a suffering man or woman, and thus secure his or her lasting thanks, appreciation and good will.

All of us occasionally have patients who consult us concerning some form of skin irritation, such as scaling patches, heaped up epithelium (a keratosis), a chronic abrasion, a lump under the skin of long standing, or a long standing ulcerous condition. These ailments are numerous, and in a very large majority of cases do not require radium and we should not subject our patient to an unnecessary and expensive treatment. Times are too hard, and we owe a duty to the patient who is placing himself or herself in our hands, trusting us not only with life itself, but expecting of us at least a reasonable consideration in the matter of finances.

In treating such conditions I have usually resorted to one or more of three remedies; viz., the knife, electrolysis, or the old remedy, Marsden's Paste, either modified or straight. By straight I mean a combination of arsenious acid and powdered gum acacia in the proportions of two drachms of the former with one drachm of the latter. By modified I mean that in order to prevent some of the possible pain which in some cases may occur I add to the above one scruple of cocain muriate. One often sees shallow lesions which are small and can be destroyed with a weaker paste. In such cases I sometimes use equal parts of the arsenious acid and acacia. I simply keep in my office from one to three drachms of these compounds, and when a case presents itself I get a little of it, and but little is required, place it in some such article as a watch glass and add just enough water to form a paste about the consistency of ordinary cream, and only three to a half dozen drops of water is usually required. Before doing this I have prepared the affected part by thoroughly curetting away, with an ordinary sharp spoon or surgical curette, all the fungus or crusted area of the sore leaving a raw, oozing surface exposed. When all bleeding has stopped I cover this surface with the above described paste. Over this I place a small square of surgical gauze, single thick-



ness, and just large enough to cover the diseased area. Next I apply over the area a piece of isinglass plaster or a strip of zinc oxide adhesive plaster. This I allow to remain for fifteen hours when it is removed. If the diseased part does not have the appearance of having been sufficiently affected by the paste, or if a little more curetting seems indicated I do this and apply a second dressing, the same as that just described, and allow this second one to remain twelve hours, when it is removed. If I am still uncertain as to the destruction of the diseased tissue, I apply a third dressing and allow it to remain eight hours. A third dressing is rarely needed, as one or two treatments usually accomplish the purpose. When the medicine has taken proper effect the sore will usually have a bluish or brownish black appearance which you will soon learn to recognize.

In some cases a patient will present himself with a diseased point covered by scales or scabs, and having beneath the skin a tumor, thus presenting the appearance of an endothelioma or perhaps a carcinoma. When such is the case, of course careful excision of the mass should be considered. I have done this in a number of instances, and then used a paste dressing, keeping in mind the possibility of having left diseased tissue. I have never had reason to regret this procedure. In my experience with such troubles I have had several cases in which the lip was involved, due to the habit of smoking a pipe or cigars. In two of these cases it was essential to remove a v-shaped piece of diseased flesh. I then applied the paste as suggested, and each case made a prompt, complete recovery, almost without a scar. Very little scar is usually left after such paste treatments. Of course there are a number of other remedies sometimes resorted to in the treatment of these cases, as electrolysis, the electric needle or spark, caustic potash, the actual cautery or other caustics, but in my experience nothing has been so satisfactory as the Marsden treatment.

As to possible pain in this treatment I have never found it necessary in but two or three instances to resort to the use of an opiate for pain relief. In the subsequent

treatment only such as is used in the treatment of any ordinary sore is needed. As will be seen the remedies referred to can be easily and cheaply had as well as used by almost any physician and a large majority of his patients will be completely relieved, and go away thanking him, and will not begrudge a neat fee for the service. Before closing allow me to urge that no patient who has on his face, neck, hand, or anywhere on his body, such places as I have outlined be allowed to put off early treatment for in this way not only is the patient given proper advice, but a cure is far nearer certain. Delay brings extension into the lymphatics and to other neighboring tissues with therefore multiplied danger of incurability.

#### DISCUSSION ON PAPER OF DR. DEAN

*Dr. Howard Hailey*, Atlanta, Ga.—I cannot agree with Dr. Dean that skin cancer covers the multitude of conditions he has enumerated. A person either has a skin cancer or he doesn't have it. It is well to establish the diagnosis before instituting treatment. I have had no experience with caustic methods of treating skin carcinoma, but have seen many results in clinics and private practice. I have seen the late Doctor Hutchins administer caustic treatment and the pain was excruciating. In this day of modern treatment I think we all want to escape pain.

As to the cost, the patient's economic condition guides us as to the expense in such cases. In medicine as elsewhere, the cheapest is not the best.

In closing I wish to ask Doctor Dean whether he refers to "electrodiesiccation" when he spoke of "electrolysis." Electrolysis is a very slow procedure. The danger of instigating complications by the use of caustics in the hands of those not experienced is as great as with radium and the roentgen-ray. I have seen the nose permanently perforated from the caustic treatment of an undiagnosed lesion. Caustic applications are not selective in their action as is radium and the roentgen-ray. Chemical caustics destroy normal as well as diseased tissue.

*Dr. Herbert S. Alden*, Atlanta, Ga.—I cannot agree with Doctor Dean on what he has just said.

As Doctor Hailey stated the diagnosis is the most important thing. I do not think Doctor Dean should include in the conditions he mentioned for treatment, "moles and like conditions." The word "mole," I think should be left out of any such discussion as related to skin cancer. Moles, when treated by anything other than thorough removal, not with any caustic such as Marsden's paste, may become very dangerous and produce a highly malignant melanoma.

The diagnosis of skin cancer is very difficult. There are many points of difference between the keratoses—old age spots that occur in certain individuals—and

the "little crusts" Doctor Dean spoke of and true skin cancer. There is a vast difference in malignancy between these precancerous growths and true skin cancer, and there is no advantage in destroying much of the skin tissue by means of caustic applications when removing a non-malignant growth.

I note, in reference to the treatment of cancer of the lip, Doctor Dean made a remark about making a V shaped incision for removal of these growths. Personally I think it much better to operate on these cases by using an inverted V shaped incision, thus including the surrounding lymphatics. Cancer of the lower lip cannot be treated without attention to the lymph nodes of the neck, for nearly every case has some metastases in this area.

The first essential in the treatment of all possible skin cancers is to be as sure as possible of the diagnosis. Then we must take into consideration its location—whether on the upper half or the lower half of the face—since those cancers on the upper half are of the local malignant type and those of the lower half are usually of the highly malignant type. Then we must be guided in the treatment by the extent of malignancy and condition of the patient. We must then select a controllable and selective treatment but rarely if ever should we use any such caustic as uncontrollable and unselective as the concoction known as Marsden's paste.

*Dr. J. W. Palmer*, Ailey, Ga.—I am glad Doctor Dean read this paper. It is a very important paper. From the discussion I see that many of us are still unfamiliar with the arsenious paste. If you have radium, use it. If you have the roentgen-ray available, use it. If you are in rural districts, use arsenious paste. I have used it on many occasions and had delightful results. I have never had a recurrence when I have used this paste. I notice those discussing the paper spoke of destroying good tissues by these methods. There is one thing about arsenious paste, it will not attack anything but pathological tissue. I have observed this by clinical experience and am sure you need not be afraid of destroying normal tissue by using it. I use it a little stronger than the essayist. I use just enough of the powdered acacia to make the arsenious acid and the water adhere. I never use arsenious paste at mucocutaneous junction. If a patient has epithelioma of the lip I think that patient should be treated with the x-ray or radium. I am always afraid to use the arsenious paste on mucous membrane lesions. Two things you accomplish; one is that those patients who live in small towns in moderate circumstances feel that they must consider railroad fare and other expense, and if you can get the same results for one-tenth the cost of using radium or x-ray, I think we should do it. Another thing to be taken into consideration is the fact that the cults or cancer doctors are not going to be so prevalent. These men would not be able to slip in if we would pick up these little things and look after them. You know there are fellows around in the country who buy a prescription for arsenious paste and then become a "cancer doctor." They use this paste and get the same results as you do with other remedies. You have to

use your head and your judgment, and select your cases but I have never had a recurrence after using arsenious paste.

*Dr. Guy T. Bernard*, Augusta, Ga.—It has been brought out that the diagnosis is the whole thing in these cases. A keratosis is just a little piling up of the top layers of the skin. Some of these will never become malignant and many of them go away spontaneously, perhaps after putting on a little oil or mentholatum. It is the one in ten that is going to become a cancer. The basal cell growth is a low-grade local malignancy and does not tend to metastasize. Anything that is escharotic or destructive in its nature will kill it, radium and x-ray being the best. Unfortunately, some of these growths are not basal cell; they are squamous cell and they tend to metastasize very early. If they are not cured they will kill the patient. It is all right to try to differentiate one from the other. The basal cell growths have many locations, but they prefer the upper part of the face while the squamous cell prefer the lower part of the face and the lower lip, but we cannot always tell definitely about them. The squamous cell growth may occur on the top of the head and the basal cell on the body. The accuracy of our treatment depends upon the diagnosis we can make. I doubt very much if a squamous cell growth that has reached considerable size should be treated by any method other than complete excision. This is safest. You have a chance then to know what you are up against and whether there is a need of doing something for the regional glands.

I do not feel that any man should have just one way of treating all of these growths. I do not think that is scientific and it does not give the patient a fair deal. We should study the case carefully, come as near the diagnosis as possible, and then do whatever we think will give the patient the best chance to get well. In this day and time I do not think it is justifiable to withhold from a patient the best treatment because of financial reasons or anything else. They come to town anyway and so far as the expense of treatment is concerned, I do not know how it is in the rest of Georgia, but in Augusta anybody can get anything we have—and they do get it all the time. The entire resources of our college and our hospitals are at the disposal of our patients, and I do not believe the expense of coming to town for treatment should have very much weight. Certainly lack of finances has no weight, in Augusta at any rate.

*Dr. Stewart R. Roberts*, Atlanta, Ga.—I think Doctor Dean has done a real service to the Association in bringing this matter of skin cancer to our attention. It is probably true that we are beginning to diagnose cancer earlier than formerly. But it is also true that there is probably a notable increase in cancer. We are cancer minded, because cancer is seen more frequently and in more varied form.

Furthermore, we notably neglect diseases of the skin in the United States. In England dermatology is included as a chapter in the text books on the practice of medicine; on the contrary, in America there are



separate books on dermatology and they are usually so large that the subject is neglected. Dr. Floyd McRae, Sr., told me once that among his different post graduate courses, the brief one on the skin was of more value to him than any other.

I rarely see an individual over forty years of age, who presents himself for examination who does not present some pathology of the skin in the form of nevi, moles, or keratoses of some variety or location. We have had two patients during the last year, who came for examination, who had a skin cancer developing from a black mole. These two illustrations alone prove the potential danger in the mole and the wisdom of an annual examination.

The senile skin is notably fertile ground for pathology. I know of no more interesting title for a paper than "The Senile Skin." In old age, there is the decrease of the activity in the glands, particularly of the thyroid gland, changes in the vessels with cold in the extremities, the atrophy of the subcutaneous fatty tissue, and the notable increase in keratoses, moles and nevi. I think Doctor Dean's paper should be appreciated because he has called our attention not only to the skin, but to the epitheliomas of the skin.

There is a difference in regard to methods of treatment. Certainly it is probable that radium at the present time is the ideal kind of treatment if radium can be had. The item of cost to the patient for the use of radium has come into the discussion. Many patients, as Doctor Dean has said, are so far from medical centers and their poverty is so marked, that they go for radium or roentgen-ray with difficulty. Increasingly, it is the element of cost, in the care of the patient, in skin cancer as in every other disease. The patient counts not alone the fee for the doctor, but the loss of time, the loss of income, hospital fee, nursing care, medicines and other minor costs. We started with the diagnosis and treatment of skin cancer and we come, as we so often do these days, to the costs of the treatment. It is a large and increasingly important subject.

**Dr. J. G. Dean, Dawson, Ga.**—(Closing.)—I appreciate very much what has been said by the gentlemen who have seen fit not only to discuss, but to criticize my paper.

I am, however, reminded of a circumstance of my childhood when being taught to write by a teacher who had the habit of giving copies by which I was taught the art of writing which were so constructed as that each word of the copy would begin with the same letter of the alphabet. When he reached the letter "D" his copy read as follows:

"Doctors disagree, Dunces decide doubtful dogmas."

These gentlemen have shown a disposition to disagree with me, to which I have no objection, I have only stated facts, as they will find if my advice is followed. I did not say that all moles terminate in an epithelioma; I did not say that every keratosis would have such a termination; I did not say that every old fissure would result in a cancer, nor did I say that all chronic ulcers find such an end, but I do say that all

such as named are fruitful sources of the skin cancer, and should not be treated lightly, but should always have prompt attention on the basis of that truism that "an ounce of preventive is worth a pound of cure".

While I have had training in the use of the microscope I lay no claim to being an expert in the use of this instrument, for, like virtually all general practitioners, I have not, like the pathologist, kept thorough in its use. In the remedy I have emphasized we have a most useful, safe, valuable, as well as one easily had by any doctor, then why not use it?

I wish I had the time to tell you of numerous experiences I have had in its use, and will tell you of just one case.

Some years ago an elderly lady walked into my office, and greeted me about as follows: "Doctor I have come to see if you think you can do anything for this place on my face, having heard that you probably can". The place referred to was an old, ugly, chronic ulcer, covering one-third or more of one side of her face, and affecting the entire depth of the true skin. There was little doubt as to its character. She also stated that she had not attended her church for five or six years because she was frequently embarrassed by being asked by her friends what her trouble was. I told her I thought I could relieve her, and proceeded to give her trouble attention. After having her to return to my office for attention the two following days I virtually dismissed her, feeling that I had destroyed her trouble.

About six weeks later she returned to my office, and greeted me about as follows: "Doctor, I am here to express to you my great appreciation for the service you have rendered me. I attended my church." (which was about seven miles in the country) "last Sunday for the first time in years, you are a great doctor, and I shall not forget you".

I appreciate very deeply the kindly expressions regarding my paper made by Drs. Stewart Roberts and J. W. Palmer.

#### ACUTE TUBERCULOUS IRITIS

F. H. Verhoeff, Boston (*Journal A. M. A.*, August 23, 1930), relates the case of a man, aged 64, with retinitis pigmentosa, blind for more than twenty years, who developed in one eye acute fibrinous iritis clinically similar to acute "rheumatic" iritis. Roentgen examination of the chest showed marked evidences of old pulmonary tuberculosis. There was no cough or elevation of temperature. On account of pain the eye was removed about five days after the onset of the subjective symptoms. Microscopic examination showed small recent tuberculous foci in the iris which had given rise to a fibrinous exudate in the pupil. The acute reaction may have been due to an allergic condition of the patient toward tuberculous toxins. Since the case does not conform to any type of tuberculous iritis hitherto recognized, it suggests that some, possibly many, cases of supposed "rheumatic" iritis are due to tuberculosis.



## SPINAL ANESTHESIA\*

R. M. HARBIN, JR., M.D.

*Rome*

The use of spinal anesthesia is increasing daily but it is doubtful whether the routine technic of morphia, nitrous-oxide-ether sequence will ever be supplanted by newer procedures. A long period of years of experience will be required to overturn such convictions from surgical experience. Perhaps no other department of surgical activities has reached such a degree of standardization as this type of general anesthesia and whatever disagreeable results may attend the use of such procedures are more due to a faulty technic than to the method itself. The over-enthusiasts of newer anesthetic agents should bear in mind these facts.

Spinal anesthesia has been made safe, or in other words as safe as any anesthetic may be. There are, however, hazards with any procedure and accidents still continue to happen even with ether when ordinary precautions are not safeguarded. The same applies to the spinal method where the administration requires a more careful technic.

Many various solutions have been employed, most of which have as a basis some derivative of the cocain series but all references here are made to the use of a preparation known as neocaine which is a synthetic product, belonging to one of the benzomethyl-diethyl series. It is six to ten times less toxic than cocain, is not irritating to the tissues, is rapidly and completely absorbed, is not decomposed by the addition of adrenalin and is soluble in equal parts of water.

Neocaine when injected into the subarachnoid space does not rise or fall with the position of the patient but is immediately fixed to the sensory nerve roots for which it has a selectivity thereby leaving the motor nerves unimpaired. The use of the modified Trendelenberg position is purely in relation to the blood pressure for it has been definitely established that bulbar paralysis in lower animals does not take place even when the medulla is bathed in a solution the con-

centration of which was much greater than that used ordinarily for the induction of anesthesia in human beings. Tactile sense in the anesthetized area is retained but no pain whatever is experienced. Impulses originating at the nerve endings produced by the inevitable trauma of any operation are blocked at the entrance to the cord thereby eliminating the nervous exhaustion which it is claimed is the basis of surgical shock. A fall in blood pressure is often present, due to an involvement of the roots supplying the constrictor fibers to the abdominal blood vessels and the fall in pressure may be so great that no reading can be obtained, but with no signs of cardiac failure. If a fatality occurs it is not due to a myocardial failure or a primary respiratory paralysis but is the result of a cerebral and bulbar anemia. This danger can be entirely eliminated by the Trendelenberg position so as to allow gravitation of blood to the brain.

Should the blood pressure fall to zero and remain there 20-30 minutes no alarm should be felt provided the patient remains in the Trendelenberg position until the anesthetic wears off. To guard against this fall 1 c.c. of adrenalin, .050 gm. of ephedrine or .5 gm. of caffeine sodium benzoate may be given before or after the slump and will serve to stabilize the blood pressure to a certain extent. In some cases it has been found well to give .050 gm. of ephedrine twenty minutes before the introduction of the anesthetic agent and followed twenty minutes after administration by another .050 gm. of ephedrine for sustaining the blood pressure at a proper level. Normal saline solution may be given intravenously or by hypodermoclyses.

There are no contra-indications for its use in general surgery and it is particularly indicated in cases of hypertension, heart disease, nephritis and pulmonary lesions where an inhalation anesthetic would be unsuitable. Recently the field for its use has been broadened from that area below the diaphragm to any part of the body. In the clinic of Koster and Kasman of Brooklyn, N. Y., it has been employed exclusively during the past four years on all cases of work below the diaphragm and in the past one and one-half

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years to include all cases of general surgery even to thyroidectomies, mastoidectomies and in any case where surgery is indicated excepting only neurological work, without a single death due to the anesthetic covering some 1,400 operations below the diaphragm and 750 cases of generalized body anesthesia.

The technic is very simple and can be carried out by anyone who has done a reasonable number of spinal punctures. It has been found expedient to give .010 gm. of morphia and .0003 gm. of scopolamine as a preliminary, and often times the patient will sleep through the entire procedure. An accurate chart of blood pressure, pulse and respiration should be kept. The best results are obtained by placing the patient on his side flexing the head and thighs to arch the back as much as possible thereby producing a separation of the lumbar vertebrae. Any ordinary spinal puncture needle that fits a syringe can be used, preferably one of a No. 20 gauge and having a short bevel, this being large enough for the introduction and yet small enough to reduce to a minimum the leakage of spinal fluid into the tissues following the withdrawal of the needle. The puncture should be made in the interspace between the second and third lumbar vertebra. By infiltrating the skin and subcutaneous tissues over the site with a one percent novocain solution the needle can be introduced with no pain or discomfort to the patient. The needle is then introduced into the sub-arachnoid space. The height of the anesthesia is regulated not by the tilt of the table but by the amount of spinal fluid utilized for dissolving the drug. The greater amount of cerebro-spinal fluid withdrawn the greater will be the amount of diffusion and therefore the higher the level of anesthesia. 4 c.c. of spinal fluid is mixed with .100 gm. of neocaine (that amount being necessary to fill one ampoule) and is sufficient for any operation below the diaphragm lasting not more than one hour. It is essential that the drug be completely dissolved in the spinal fluid and injected slowly inward and outward several times, care being taken not to withdraw over 4 c.c. Immediately after the injection the stillete is replaced, the needle removed and the patient

placed in a modified Trendelenberg position. No time should be lost in beginning the operation as the anesthesia takes place immediately following the injection. After the operation the patient should be kept in Trendelenberg position for three hours after which the foot of the bed should be elevated for the first twelve hours. Determination of blood pressure should be made at intervals of five minutes during the operation and every fifteen to twenty minutes for at least three hours following the operation.

If anesthesia of the thorax and head is desired .250 gm. of neocaine dissolved in 8 c.c of cerebro spinal fluid is used in the same manner. This method applies to adults and children above the ages of twelve or fourteen years. Under these ages the dosage is diminished proportionately.

The most frequent complication encountered is headache in varying intensities and may be controlled by magnesium sulphate enemata consisting of 180 c.c of a fifty percent solution of magnesium sulphate given every four hours. If this procedure fails an escape of 10-15 c.c of cerebro spinal fluid from a spinal puncture usually gives relief.

My personal experience is limited to its administration in only seventy-five cases, throughout all of which neocaine was used and by following the few simple rules set forth no disagreeable results were encountered.

The following typical cases for spinal anesthesia occurring during the present year are briefly outlined.

#### Case Reports

*Case 1.* White female, age 64 years. Diagnosis, gangrene of right foot and lower one-third of leg from obliterating endarteritis. Patient very toxic, rales posteriorly in both lungs, with a moderate degree of myocarditis. .125 gm. of neocaine was given. Right middle thigh amputation was done with one hundred percent anesthesia of the lower extremities. The patient made an uneventful recovery. The blood pressure showed a fall of 15 mm. of mercury, but before the operation was ended it had risen above the normal level following administration of 1 c.c of adrenalin.

*Case 2.* White male, age 39 years. Diagnosis, acute appendicitis. Patient was reported to have bilateral pulmonary tuberculosis, which was verified by examination. .150 gm. neocaine was given, immediately followed by 1 c.c of adrenalin. The blood pressure remained at constant level throughout. The patient made an uneventful post operative recovery.



Throughout the entire procedure the patient experienced not the slightest discomfort, he was kept constantly in conversation of a diverting character.

**Case 3.** White male, age 43 years. Diagnosis, large left inguinal hernia complicated by pernicious anemia. He had been treated for the latter during the six weeks prior to operation with liver extract therapy bringing the blood up to sixty percent hemoglobin and 3,310,000 red blood cells. .125 gm. neocaine was given and the repair made. No circulatory stimulants were given until the blood pressure began to fall, systolic from 120 mm. to 80 mm. and the diastolic proportionately during the course of fifteen minutes. 1 c.c. of adrenalin was given and fifteen minutes later the blood pressure had returned to its normal level and remained there. The anesthetic disappeared without incident.

**Case 4.** White male, age 69 years. Diagnosis, hypertrophy of prostate. .100 gm. neocaine was given. Fifteen minutes later blood pressure had fallen from systolic 130, diastolic 75, to systolic 75, and diastolic 50. He experienced some nausea, vomited once and complained of dizziness. 1 c.c. of adrenalin was given and twenty minutes later the blood pressure had risen to 5 mm. above its normal level, with relief of nausea and no further complaints were made.

**Case 5.** White female, age 50 years. Diagnosis, large ovarian cyst. Systolic blood pressure 230 mm. and diastolic 130 mm. .150 gm. of neocaine was given and the blood pressure began to fall. Due to the marked hypertension no effort to check its fall was made. Within fifteen minutes the systolic had fallen to 120 mm. and diastolic 80 mm., and remained at this level for ten minutes when suddenly the systolic dropped to 100 mm. At this point the patient complained of nausea and giddiness. She was given .025 gm. of ephedrine in two successive doses and the systolic pressure showed a rise to 130 mm. with entire relief of symptoms. It remained at this level until the close of operation. One hour later the systolic had reached 190 mm. Anesthesia of the field of operation was complete.

Strange to say there as a well nigh universal apprehension on the part of even the intelligent laity that esteems the loss of consciousness from general anesthesia the major danger of surgical procedure, and for this reason, other things being equal, there is a strong appeal for spinal anesthesia.

Perhaps its most undesirable feature is the fall in blood pressure with its accompanying symptoms and potential danger, but this can be almost entirely eliminated by the use of circulatory stimulants and the Trendelenburg position.

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#### DISCUSSION ON PAPER OF DR. HARBIN, JR.

**Dr. A. A. Morrison,** Savannah, Ga.—I think that Doctor Harbin should be congratulated for presenting this subject to the Association.

Spinal anesthesia was first performed by Corning in 1884 on a dog. In 1889 Matas, of New Orleans, injected a 1 per cent cocaine solution into the spinal canal of man between the fourth and fifth lumbar vertebra for a hemorrhoidectomy, with successful results. Brier of Germany also demonstrated the surgical application of spinal anesthesia in the same year, but did not report his results until 1900.

Spinal anesthesia has been used sporadically since, but due to its many accidents, namely, (1) use of toxic drugs, (2) excessive dosage, (3) faulty technic, (4) lack of understanding of the mechanism by which the vascular tone is maintained and the circulation in the medullary center assured, it did not become popular. But with our present knowledge and the discovery of ephedrin it is now one of our safest anesthetics, when used in properly selected cases.

Spinal anesthesia should not be given to a patient in shock. I take issue with the doctor in regard to the blood pressure going to zero, and think that any patient whose systolic pressure goes below 50 m.m. should be taken seriously and ephedrin, adrenalin, or saline infusion given to elevate the pressure.

I do not think it makes any difference whether the spinal puncture is performed in the prone or sitting position, provided the patient is immediately placed in the Trendelenburg position, which we all know is the sheet anchor in spinal anesthesia.

It is important that one should remember that his patient is not asleep; therefore, his conversation should be guarded and the handling of instruments should be as noiseless as possible. If the patient is in a talkative mood I think it advisable for someone to sit at the head of the table to carry on conversation.

The complications of spinal anesthesia are: (1) Fall in blood pressure; (2) cerebral anemia; (3) paralysis of respiration; (4) postoperative headache; (5) nausea and vomiting; (6) injury to cord and spinal nerves; (7) urinary retention; (8) postoperative hemorrhage.

The fall in blood pressure and nausea and vomiting are controlled by the use of ephedrin and saline infusion. Cerebral anemia can be controlled by the use of the Trendelenburg position. Paralysis of respiration very rarely occurs and when it does must be controlled by the use of oxygen and artificial respiration. Injuries to the cord and spinal nerves have been reported but fortunately rarely are permanent. Postoperative headache and visual disturbances are usually due to a serious meningitis and are relieved by the use of magnesium sulphate solution or by spinal puncture in persistent cases. One must be careful in tying off all bleeding points, for the bloodpressure is lowered and any oozing may become an active bleeding after the pressure has returned to normal.

Spinal anesthesia has an advantage over inhalation anesthesia in that it apparently has no deleterious effect on the heart, kidneys, liver, or lungs. We do not have a state of shock for the impulses are blocked and do not reach the brain substance. One of the greatest



advantages of spinal anesthesia is that we do not have to contend with a postoperative ether patient, who requires a nurse for at least three or four hours, is usually extremely nauseated and vomiting, becomes dehydrated and possibly develops an ether pneumonia.

**Dr. George W. Fuller**, Atlanta, Ga.—I enjoyed Doctor Harbin's paper, for I have been interested in spinal anesthesia for several years. Doctor Harbin uses neocain, while I use spinocain. Novocain is the anesthetic agent in both. The former is a French novocain, while that used in spinocain is an American product. The action is the same with both; just a different technique of administration.

Some of the points in Doctor Harbin's paper I disagree with slightly. He advises taking the blood pressure every fifteen to twenty minutes for three hours after the operation. I feel that this is not only unnecessary, but a waste of time. I would rather advise this with general anesthesia than with spinal anesthesia.

It is a fact that as far as the spinal anesthesia is concerned, we can almost forget the patient after leaving the operating room. Within fifteen minutes spinal anesthesia has usually reached its maximum effect, and the patient's condition improves every minute thereafter, while with general anesthesia the condition grows worse as the anesthetic is prolonged.

Some men say they have difficulty in getting anesthesia, and for this reason decline to use the method. This usually means that it was not properly given, or too little given. I have adopted the habit of using 3 c.c. of spinocain for all abdominal operations. The higher the operation, the higher should be the point of injection in the lumbar region. In using general anesthesia you would not start operating until the patient was anesthetized; the same is true with spinal anesthesia. If one would have no failure, let him not drape the patient until complete anesthesia exists slightly above the level of the proposed incision. If anesthesia is not obtained within ten to fifteen minutes, the patient should have  $1\frac{1}{2}$  cc. more, one interspace above the first. After this, almost without exception, the operation can be started as soon as the field of operation is prepared, and the patient draped.

The second injection is given with more boldness than the first, for we know from the first the patient's reaction to novocain. One of the great advantages of spinal anesthesia is the absence of shock. One seldom sees surgical shock where it is used. The surgeon can work more rapidly.

I am sure that I can do the average appendectomy complete within the time that it usually takes me to close the incision under general anesthesia; certainly where gas-oxygen is used. The intestines lie back out of the way and are not traumatized. There is less tension, less distension, less nausea, and the patient does better in every way.

I have seen no untoward results with spinal anesthesia since I started using it in 1916. For the last two years I have been using it almost as a routine for all major surgery below the diaphragm. Accidents are reported, but this is true with all anesthetics.

I just left a patient that has developed an abscess in the apex of the right lung, following inhalation anesthesia. Most accidents occur in the hands of those who have not taken time to familiarize themselves with the method.

I appreciate the privilege of hearing and discussing Doctor Harbin's excellent paper.

**Dr. Earl Floyd**, Atlanta, Ga.—I don't suppose there is any branch of surgery where spinocain is used with as gratifying results as in urology, particularly operations upon the bladder and prostate. It is a source of comfort to the operator in doing a prostatectomy on an elderly individual under spinocain, whose respiratory condition is nearly always embarrassed, kidney function low, high blood chemistry and general condition under par. Under spinocain relaxation is perfect and bleeding very little. The lung complications are of course not nearly so likely. There is no depressing effect upon the kidneys. As soon as the patient who has had spinocain is back in bed he is ready to take fluids by mouth. The fact that the patient does not lose consciousness is, I think, a great help mentally to many of these men. Headaches are rare now since it is being given slowly.

I have used it almost exclusively in the past two years and do not recall having severe toxic symptoms or signs of circulatory collapse in a single case and I heartily recommend it to you as a very good anesthetic in doing prostatic work.

**Dr. Arthur D. Little**, Thomasville, Ga.—I have enjoyed the paper very much and the discussion. Spinal anesthesia is intriguing, to say the least. We have with us always what we call "poor surgical risks." We lie awake at night thinking about the patient we have to operate upon in the morning, and we sometimes have considerable doubt as to the final outcome. Those patients certainly do well under spinal anesthesia when there is a bad heart, or high blood pressure, or anything that makes them a doubtful risk. They react so well to spinal anesthesia that we feel that we have worried unnecessarily. I believe we can do anything under spinal anesthesia that we can do under general anesthesia, and do it better. We have about 150 cases now and are doing more and more operations under spinocain, using the Pitkin method. We are not taking any chances with it. We have a trained anesthetist who has gone into it thoroughly and she watches the patients carefully and keeps the surgeon informed. That is very important. When we are going to operate under spinal anesthesia we mark that on the patient's chart the night before. The back is prepared with just as much care as is the abdomen for a laparotomy, and we are very particular in introducing the anesthetic.

The postoperative course in these cases is delightful. The patients have no nausea, and they do not have to go through the period of reaction that they do under a general anesthetic. However, with all these points, I believe at this time, with our present knowledge, that it is an anesthetic of election in cases in general. I do not think we are quite ready to throw away our general anesthetics. I think we have to learn a little

more about it to be sure. It is an innovation, although it is an old method. There is a tendency for the pendulum to swing too far and it will swing back before it strikes the happy medium. Let us go slowly, feeling our way gently, using it only in the cases where it is indicated. Don't let the patient come in and say, "Doc, I have a hernia and hear you can operate without putting me to sleep." Always select your case and use the anesthetic that is best suited to the conditions presenting.

**Dr. A. J. Mooney**, Statesboro, Ga.—I wish to pay my little tribute to spinocain, for which form of spinal anesthesia I have used exclusively. I have used that agent in various types of operations, in hemorrhoids, hernias, appendectomies, different types of bone operations, vaginal operations, and so on, and wish to say that I consider it absolutely safe. This is backed up by surgeons in India who have used spinal anesthesia in 5,000 cases without a fatality.

One little point I wish to call to your attention is the technic. Formerly one of the disadvantages was the headache and other postoperative symptoms and conditions which were due to the use of a large needle, or perhaps to breaking the needle off. That has occurred so frequently that Dr. Frank Lahey recently published a special article on the removal of needles that had been broken off in doing spinal anesthesia. The best thing is to use the Pitkin needle, which is so small that even if a vessel is hit the hemorrhage is very slight and the spinal fluid comes out very slowly so that there is gradual lowering of the fluid pressure. These needles are very flexible and I cannot conceive of breaking one off in the spine in administering a spinal anesthetic.

**Dr. Lon W. Grove**, Atlanta, Ga.—During the last few weeks, I have had an opportunity to look in on most of the large clinics of this country, beginning with the Lahey Clinic in Boston, and winding up with the Mayo Clinic in Rochester, Minn., and it appears that spinal anesthesia is here to stay. It is not without its danger however, and should only be used by those well qualified and equipped to use it. As an example as to how it is regarded by those most familiar with it; in the Lahey Clinic, the chief anesthetist who is a doctor supervises all spinal anesthetics, whereas, the nurse anesthetist is used for general anesthesia. Dr. Lahey apparently attaches much more importance to a spinal anesthetic than to a general, either gas or ether.

In Brooklyn I had the opportunity of observing Dr. Koster, who is an enthusiast and quite an expert in using spinal anesthesia. He impressed me as using it rather indiscriminately. I was somewhat shocked when he was preparing to operate on a four year old child, to have him tell me that he was giving twice as much neocain as was necessary to produce anesthesia, in order to demonstrate to me its wide range of safety, and to prove that he could produce anesthesia of the scalp. That child went to sleep, which proved that he was getting considerable anesthesia, even in the neighborhood of the cortex. He impressed me as being very careful and honest in his work, and demonstrated many cases who had been operated upon.

The men in Chicago are afraid of spinal anesthesia. Dr. Bevan will not allow it to be used in the Presbyterian Hospital.

Opinion seems to be very much divided, at the Mayo Clinic. For instance, while Doctor Judd is using it quite extensively, Doctor Hunt is opposed to it. I learned from Doctor Lunday that it had not been very popular there.

I think that we can readily appreciate the fact that there are certain situations in which spinal anesthesia is absolutely contra-indicated. One is intra-abdominal abscess. There is produced a negative intra-abdominal pressure and when the abscess cavity is opened, it is possible to have the septic material gravitate in all directions inviting a peritonitis before the operation is finished.

**Dr. C. H. Richardson, Jr.**, Macon, Ga.—I am interested in spinal anesthesia and think the time has come when we should say some definite things about it. Is it an anesthetic of choice in the average case? The answer is, "No." It requires special skill and study before an operation is undertaken. Are there any contra-indications? There are. As Doctor Grove brought out, in appendical abscess the infection may spread into the abdomen. We must also take into consideration the fact that a patient may get a fall in blood pressure of 100 or more points. Does this fall in blood pressure affect the tissues? I have operated upon a patient who had a systolic pressure of 30 mm., but that does not make you feel that you are having a good time, and you must realize that it does in some way affect the tissues. It seems to me that we are all more likely to use spinal anesthesia in service cases than in private cases.

What is the cause of death in these cases? Is it bulbar paralysis? No, it is cerebral anemia, brought about by the bulbar centers failing to act properly. Does it paralyze the spinal centers? It has been proved very conclusively by Labat that it does not diffuse. Other men have opened the brain in experimental animals and painted it with a strong solution of novocain without having any effect on the centers.

What are the special indications? One is intestinal obstruction. No one wishes to operate on these patients, but at the same time if we operate under ether anesthesia the minute the abdomen is opened the intestines extrude and you produce trauma in attempting to replace them. The patient also empties his stomach of its contents and is likely to drown in his own secretion. Under spinal anesthesia you can reach into the abdomen, pick up the obstructed loop, release the obstruction and not put in a single gauze pack. The advantages are absence of shock in the poor surgical risk, and the return to bed in good condition.

A word about the technic. We inject all of our patients in the sitting position using neocain, and immediately place them in the Trendelenburg position. We send them back to the ward on a stretcher also in the Trendelenburg position and keep them in this position in bed for three hours. We have had no fatality, but we do not feel comfortable when the



anesthetist tells us that a patient has a systolic blood pressure of 30 mm. That does not make us happy.

*Dr. R. M. Harbin, Jr., Rome, Ga.*—(Closing.)—I wish to thank the gentlemen for their generous discussion. However, it was not my purpose to present this type of anesthesia in comparison to others, but to give an outline of the physiology and the practical application of neocain alone. It is stated by the manufacturer that neocain is in no way a derivative of cocain, but purely a synthetic product.

That neocain does not cause a respiratory paralysis has been conclusively shown and should an accident occur it is due to the fall in blood pressure and a subsequent cerebral and bulbar anemia rather than a primary bulbar paralysis.

### LAWS GOVERNING THE HEALING ART IN GEORGIA\*

J. O. ELROD, M.D.  
*Forsyth*

My purpose in writing this paper is to answer a number of questions, which have been propounded to me during my service as a member of the State Board of Medical Examiners of Georgia, as to the legal practice of the healing art in Georgia and to enlist the co-operation of the medical profession of our State in trying to enforce the laws on the statute books of our State governing the practice of the healing art.

We have three separate laws in Georgia governing the Healing Art. Each of them has its various requirements regarding the qualifications of the applicant, such as efficiency, conduct, etc.

It is impossible for me to give you now all the different laws, but I shall give you a few essential points of each and refer you to different acts in the State Code that you may read them for your information if at any time you should need this knowledge. After I have given you this information I will offer some recommendations for more rigid enforcement of all of our present laws without revision, after which I will offer some suggestions for revision to be discussed by you.

I will discuss first the law which governs our own school of medicine, by commenting on the various sections and referring you to

the various sections of the State Code for the full text of the law.

**Definition of Practitioner, Practice of Medicine:** To hold one's self out to the public as being engaged, within this State, in diagnosis or treatment of disease, defects, or injuries of human beings, or the suggestion, recommendation or prescribing of any form of treatment for the intended palliation, relief or cure of any physical, mental, or functional ailment or defect of any person with the intention of receiving therefor, either directly or indirectly any fee, gift or compensation whatsoever, maintaining an office or affixing any title before or after his name. The entire definition as described in law being very long and descriptive, will be found in Park's Annotated Code, Supplement 1922, Section 1697 (n). From the abstract of the definition I have given you, you see that our law covers any act of attempting to heal or treat for compensation as an act to practice medicine.

#### *Practitioners Must Register*

"Every person lawfully engaged in the practice of medicine, within this State, before commencing to practice, shall register in the office of the clerk of the superior court of the county wherein he resides and is practicing, or intends to commence the practice of medicine, in a book to be kept for the purpose by said clerk, his name, residence, and place of birth, together with his authority for practicing medicine, as prescribed in this Chapter. The person so registering shall subscribe or verify, by oath or affirmation, before a person duly qualified to administer oaths under the laws of this State, an affidavit containing such facts, and whether such authority is by diploma or license, and the date of same, and by whom granted, which shall be exhibited to the county clerk before the applicant shall be allowed to register. The county clerk shall receive a fee of fifty cents for each registration, to be paid by the person so registering."

I have quoted this part of the law verbatim because an illegal practitioner can be convicted under this section, when often a jury will not convict one for practicing without a license. I have recently had occasion to see this demonstrated.

On April the 8th this year at Jasper, Picken County, Georgia, "a cancer specialist" by the name of Byrd was tried under an indictment covered by the section just read. Dr. B. T. Wise, Secretary and Treasurer of our Board, was summoned by the State to be at the trial of this specialist. At his request

\*Read before the Medical Association of Georgia, Augusta, Ga., May 15, 1930.



I went to Jasper with him. This "specialist" had been presented to the grand jury by one of his grateful patients, who later found that she had been tortured unnecessarily. The solicitor had him indicted under the section read, because an illegal practitioner cannot register.

The defendant had numerous grateful patients in court to prove his ability, not only patients but a licensed, registered physician of that section of the State, who, I understood, was going to swear that this man had cured patients for him who had been told by surgeons of high standing that there was no hope of recovery for them. The defendant had a long letter of appreciation from the main witness, whom he had treated, which he expected to read in court as a defense or to show his ability. The judge ruled that none of his witnesses or letters could be admitted as evidence, as his ability or right to practice was not being tried or questioned, but that he had practiced without registering with the clerk of the court, which no licensed physician can legally do.

The defendant in making his statement recited that he had practiced medicine since he was twelve years of age, beginning before the Civil War and that he had cured thousands. He stated that he had treated patients in Jasper that day and was going to continue to do so, and if he was put in jail or the penitentiary he would continue to practice. The judge in his charge to the jury told them that all the evidence in this case showed that this man had practiced in the county without registering. His own statement was that he had and was going to continue to do so. He told the jury that their duty was to consider the evidence and the defendant's statement, which they could believe or not, but if they did believe the evidence and the defendant's statement their verdict would be, "We the jury find the defendant guilty"; if they did not believe the evidence nor the defendant's statement then their verdict would be, "We the jury find the defendant not guilty". After a charge of this kind it took the jury two and one-half hours to return a verdict of guilty. This man could not have been convicted of practicing without license, as he was tried under this charge in

Fulton County about two years ago and was not convicted. The case has been appealed to the Court of Appeals; we shall, of course, watch the outcome.

#### *State Board of Medical Examiners Established—Qualifications*

I will not comment on this section of the law, you will find it in Park's Annotated Code, Supplement 1922, Section 1697 (a).

#### *Appointment of Board by Governor; Removal; Vacancies; Quorum*

The main points of this section are that the members of the Board are appointed by the Governor and that the Board shall consist of ten members, five of whom shall be Regular Physicians, three Eclectic Physicians, and two Homeopathic Physicians, and as the caption indicates, removal, vacancies, and quorum. This section will be found in Park's Annotated Code Supplement, 1922, Section 1697 (b).

#### *"Organization. Expenses. Meetings. Seal. Rules. Examinations."*

This Section covers as the caption states. Under expenses: "All expenses of the Board shall be paid out of funds collected by the Board, the remainder to be divided equally among the members of the Board." Number of meetings, where and when. This Section can be found in Park's Annotated Code Supplement, 1922, Section 1697 (d).

#### *"License to Practice Medicine, How Obtained."*

This section simply states the official steps of obtaining a license, and can be found in Park's Annotated Code Supplement, 1922, Section 1697 (e).

#### *"Recording of Certificate."*

The amendments on which I have already commented.

#### *"Power of Board Over Medical Colleges."*

This section shows the requirements for a student entering and finishing a medical course. In determining the reputability of a medical college the right to investigate and make a personal inspection of same is authorized. This section can be found in Park's Annotated Code Supplement, 1922, Section 1697 (g).

#### *Preliminary Educational Requirements.*

These requirements are two years pre-medical college course giving the various branches and number of hours that must be pursued. This requirement on our part pro-

fects the profession and the public alike. Other branches of the healing art in our State which are legalized do not have this strict requirement. Regarding this point we undertook to put through our legislative bodies last year an act creating a Basic Science Board, which would place all applicants who applied to study or practice the healing art in our State on an equal footing in regard to a basic foundation. We failed to get this bill before our legislative bodies for consideration, the reason for which most of you know.

In the State Board issue of the Journal of the American Medical Association of April 26, 1930, there is an editorial concerning "Statistics of State Board Examinations". I quote the following from this editorial:

*"The present problem in licensure."* "This problem, nevertheless, is one which the medical profession and the licensing boards must solve since they alone are qualified to recognize the difference between truth and pretense in the art of healing. Until the practice of medicine can be restricted to those having the required training and skill, the public will be exposed to errors of omission or commission from these unqualified healers. Modern scientific methods now being used in the care for sick or injured people are of great value and are saving many lives when applied by competent physicians. They are also highly dangerous if applied by bunglers or incompetents.

"In dealing with this problem, the medical profession is interested particularly in keeping its own institutions in the hands of properly qualified physicians so that the sick and injured may be cared for in accordance with the present day knowledge of medicine and of scientific procedures.

*Basic Science Boards.*

"Basic Science Boards have now been established in seven States, all of which have multiple licensing boards. Their object is to provide one educational standard which can be applied alike to all those seeking authority to practice the healing art. The establishment of such boards is a logical step and as shown in the statistics published this week, they are giving evidence of real service not only in checking the illegal practice of the cultists but also in eliminating a few incompetents from those applying as physicians."

This I consider an important step for our Committee on Public Policy and Legislation to follow up and for each of us to assist them in every way possible. Now is the time to go to work on this measure by calling on our candidates for the legislature and Senate to know how they stand on this measure; explain the measure to them and try to enlist their promise to support the measure if elected. We all consider the foregoing im-

portant, but I feel that we could possibly benefit our citizens and our profession a great deal if we would provide some measure to enforce the laws which we already have on our statute books, and which at the present are being violated every day. This I will speak of later.

*"Temporary License."*

*"Examinations of Applicants."*

*"License Fees."*

*"Issuance of Licenses."*

*"Duty of Secretary and Treasurer to Aid in Prosecution."*

These sections do not need explaining, but they can be found in Park's Annotated Code Supplement, 1922, Section 1697 (i-m).

*"Refusal of licenses and suspensions."*

"Said board may refuse to grant a license to practice medicine in this State, or may cause a licentiate's name to be removed from the records in the office of any clerk of court in this State, on the following grounds, to-wit: The employment of fraud or deception in applying for license or in passing the examination provided for in this Article; conviction of crime involving moral turpitude; (conviction for the violation of any penal provision of the 'Opium Act of 1914,' or 'Harrison Act', also called the 'Harrison Narcotic Law'); (a) the practice of medicine under a false or assumed name or impersonation of another practitioner of a like or different name; habitual intemperance in the use of ardent spirits, narcotics, or stimulants to such an extent as to incapacitate him for the performance of professional duties; the procuring, or aiding or abetting in procuring, a criminal abortion; the obtaining of a fee on representation that a manifestly incurable disease can be permanently cured; causing the publication or circulation of an advertisement of any medicine by means whereby the monthly periods of women can be regulated, or the menses, if suppressed, can be re-established; causing the publication and circulation of an advertisement relative to any disease of the sexual organs; said board may upon satisfactory proof made that any applicant (or licentiate) (a) has been guilty of any of the offenses above enumerated (refuse to grant a license to said applicant or may revoke) (a) the license of said licentiate upon a majority vote of said board. (There may be an appeal from the judgment of said board by the party who is refused a license by the board, or whose license is revoked, as the case may be, if dissatisfied with the judgment, to a jury in the superior court of the county of the residence of such dissatisfied party, said appeal to be had in other cases now provided by law. The party whose license is revoked or refused shall be liable for cost.

This entire section can be found in Park's Annotated Code Supplement, 1922, Section 1697 (m).



I have given you abstracts and entire sections of our law as enacted by said act of 1918 and codified in 1922 Supplement to Park's Annotated Code of the State of Georgia, 1914, which established the State Board of Medical Examiners of Georgia. This law is a voluminous act of twenty-five pages, which, so far, has never been amended, nor has any part thereof been declared unconstitutional, though it has suffered many attacks during its twelve years' existence and has dealt with many cases. It has the same counsel, Colonel J. Z. Foster, of Marietta, Ga., who drew said act of 1918 establishing the Board. Two of these cases were carried by the defendant physicians (N. A. Hughes and Talbert W. Hughes) through all the courts, including the Supreme Court of the United States.

As stated before, all expenses of the Board are required by statute to be paid out of funds collected by the Board. The only funds collected by the Board are license fees, which, after the payment of all expenses of the Board, are divided equally among its members. Said attorney has never lost a single case of the Board, either in the Superior Court, State Supreme Court, or in the United States Supreme Court. The Board, for lack of funds, has been unable to pay him for his services in either of the Hughes' cases that were rendered in the Supreme Court of the United States, and is still indebted to him for those fees. The Board's fees for granting licenses have averaged, during its twelve years' existence, about \$1,400 per year. Its ten members reside in different portions of the State and are required to hold two regular meetings each year, one in May or June at such time as suits the convenience of graduates of medical colleges of Atlanta and Augusta, the other on the second Tuesday in October in the State Capitol. Besides these, call meetings may be held at the discretion of the President.

We feel sure that the expenses of litigation, including the fees of the Board's attorney, should be paid by the State, leaving them to retain the amount of their license fees for the defrayment of their expenses in attending to their duties as required by the statute. The Board now has a case pending

on appeal at Rome, in Floyd County Superior Court, in which the defendant physician made the point that the Board was ineligible to revoke the license of a physician because the members of the Board paid the fees of its attorney out of their own pockets. This question is now pending before the Supreme Court of Georgia whether the Board members are ineligible to revoke the license of a physician because they paid their attorney out of funds allowed them as fees for granting licenses.

Should the Supreme Court of Georgia hold that the payment of their attorney's fees by the Board out of the fund allowed the Board for granting licenses, disqualified the Board from trying said case, then, in such event, the act will have to be amended by adding a provision for the payment of the Board's attorney by the State. Whether the Supreme Court so decides or not the increase of cases before the Board has reached the point where the Board can no longer pay its attorney, for lack of funds, and regardless of how the fee question is decided by the Supreme Court the act will have to be amended by providing for the payment of the fees of the Board's attorney or the Board will be unable to discharge its duties as prescribed by law.

Discussions at the Annual Congress on Medical Education, Medical Licensure and Hospitals as reported in the Journal of the American Medical Association of April 26, 1930.

Dr. Harrold Rypins, of Albany, N. Y., said:

"The fundamental objects of a good medical practice act are; (a) the licensing of qualified practitioners by examination or reciprocity or endorsement; (b) the elimination of unqualified practitioners by adequate prosecution of unlicensed, or by discipline of licensed practitioners. To carry out these major objects of the medical practice act, the following are necessary: a properly constituted board of medical examiners; a qualified administrative officer, and sufficient administrative funds. Efficient administration requires a secretary or administrative officer. Sufficient administrative funds are as essential as legal authority in carrying out the work of the Board. A model medical practice act must contain legal authority for the preceding requirements; consequently, it must include the essential legal authorization that would permit an active board of medical examiners to accomplish the purposes for which it exists. Its single object is the protection



of the public health by means of completely supervising the practice of the healing art. This object can be attained only by the simultaneous operation of its three major aspects, namely the proper licensure of physicians, the proper discipline of licensed physicians, and the practical elimination of those who are not licensed."

Dr. Henry M. Fitzhugh, of Baltimore, expressed his opinion on "Administration of Medical Practice Acts" as follows:

"Medical practice acts should be accompanied by efficient enforcement procedures. It is not sufficient to have simply enforcement provisions written into the law. There must be funds with which to employ proper enforcement officials, and there must be a proper working system by which the work can be properly carried out."

At the same discussion Dr. Henry Albert of Des Moines, Iowa, brought out this point:

"The public is not unanimous in regarding ethical rational medicine as the only healing agency. Legislatures also seem to regard ethical rational medicine as only one of a number of competing healing services, for in every State it is possible for some unorthodox healers to proffer their services legally. The courts when called on to curtail the activities of unorthodoxy are usually quite reluctant to recognize unorthodoxy as such and require unequivocal proof of either palpable fraud or criminal incompetence."

Laws authorizing Osteopathic Practitioners found in Park's Annotated Code of 1914, Section 1732 to 1741, 1922 Supplement of this Code, Section 1735 to 1738. The law does not define Osteopaths, but refers to them as non-drug giving practitioners and gives them the authority to license all other non-drug giving practitioners. Their educational requirements before taking their course in college is that a prospective student must be able to pass an examination to enter freshman class of any standard literary college.

Their course of instruction in osteopathic college shall be four terms of nine months each, in separate years.

Graduates standing the State examination are required to take examination on every branch of medicine except those applying to drugs, therefore they are licensed to practice in every way except that of giving drugs.

Section 1740 of their original act reads as follows: "State and Municipal Regulations."

"Osteopathic physicians shall observe and be subject to all State and Municipal regulations relating to the control of contagious diseases, the reporting and certifying of births and deaths, and all matters pertaining to public health, the same as physicians of other schools, and such reports shall be accepted by the officers or department to whom the same are made."

#### *Chiropractic Practice*

The law governing their practice will be found in Park's Annotated Code 1914, 1922 Supplement, Section 1741 (b). This being part of the original Osteopathic Bill.

*Definition of "Chiropractic":* The term "Chiropractic" as used in this Chapter is hereby defined as adjustment of the articulation of the human body, including ilium, sacrum, and coccyx and electricity in the use of x-ray photograph, but the x-ray shall not be used for therapeutical means.

Section 1741 (f) states that each applicant for examination shall be a graduate of a resident course of three years of six months each, from a chartered Chiropractic school or college which teaches only attendant courses. An applicant shall have had literary training equaling as much as a regular high school course, of fourteen Carnegie units, which school training shall be evidenced by the statistics of any recognized State Educational official, that the Governor shall appoint, etc.

#### *Practice*

Section 1741 (h): Chiropractors who have passed the Board shall have the right to adjust patients in Georgia according to specific chiropractic methods and shall observe State, Municipal and Public Health regulations, sign death and health certificates, reporting to the proper health officers, the same as other practitioners.

Chiropractors shall not prescribe or administer drugs to patients, perform surgery, nor practice obstetrics nor osteopathy.

*Revocation of license, new license, record of license.*

The laws governing these are practically the same as the laws of the other healing arts.

Our Board of Medical Examiners very often receives letters from members of our profession, reporting some illegal practitioner and asking that we prosecute the offender. Our Board fails to have one of the prerequisites as recommended by Doctor Rypins and Doctor Albert—namely, funds to carry out that part of the law. We have had to prosecute or defend a number of suits where we have revoked licenses of offenders; by doing this we have demonstrated that our law is without defects and can be enforced. A recommendation that I wish to give you in regard to enforcing the present law is that each County Society have a public policy legislation program and let one feature of this program be to see that each illegal practitioner in your county be presented to the grand jury by the solicitor of your Superior Court. When we start a clean-up campaign of this kind our laws will be treated with more respect. Your society should always be sure to make out a good case before they start, because as quoted from Doctor Fitzhugh, "The public is not so interested in protecting themselves." If the profession did not continually throw the safeguard around

them every sort of quackery known to mankind would be practiced.

As the law now stands it is just as any other law; to be enforced when called to the attention of our solicitors or grand juries and the case worked up and pushed by some lawyer employed by the person interested enough to report and prosecute the violator. This I realize will be hard to carry out as it costs time and money.

To furnish these two necessary requirements, I believe our laws should be amended so that every practitioner of any branch of the healing art should have to register with the State Board of Health once a year and these registrations checked against each county clerk's records thirty days after the registration has closed, giving the State Board of Health the power to prosecute each violator; the State to furnish the legal talent from the Attorney-General's office to follow up the cases and assist the solicitors in the various Superior Courts. This would do away with the personal equation which is often a great barrier in prosecution.

This, of course, will necessitate some amendment of the laws governing the State Board of Health and would naturally add more expense to the operation of their Board, which would call for a larger appropriation for them. This they should have any way, but by adding more for them to do we could convince our legislative bodies that their appropriation should be increased if some others have to be cut.

I am convinced that our state legislative bodies have not paid enough attention to the one thing that is her greatest asset and that is her health and health institutions. I would not decry education, but education without health is not worth a great deal. Educators are working for appropriations from January the first to January the first. If we were as diligent in educating our legislative bodies as to the value of health as the educators are as to the value of education, possibly we could secure more appropriations, thereby being enabled to better enforce our laws and also take better care of our unfortunate weak-minded and other incurables.

I wish to hereby give credit to Colonel

J. Z. Foster, of Marietta, Ga., counsel for the Board of Medical Examiners of Georgia, for giving me the proper sections of law pertaining to the various laws authorizing the various healing arts in Georgia.

### Summary

Registration of all practitioners of all healing arts necessary.

Law creating Basic Science Board enacted if possible.

Public Policy and Legislation program by each County Society to enforce the present laws.

Laws governing each healing art explained.

### Recommendations:

I would recommend that all laws pertaining to the healing art in Georgia be so amended that each practitioner must register with the State Board of Health, this registration to be checked against registration of county clerks.

That all violators of the laws governing the healing art be prosecuted by the State Board of Health, the prosecution to be carried into effect by the Attorney General of the State assisting various Solicitors of the Superior Court of the State.

### DISCUSSION ON PAPER OF DOCTOR ELROD

*Dr. C. L. Ayers*, Toccoa, Ga.—Doctor Elrod has gone into the subject of the laws governing the healing art in Georgia in a very thorough way. It is very evident to the entire profession that our existing laws in regard to healing are by no means perfect, and that what laws we have are being grossly violated every day. No district in Georgia is without its illegal practitioners.

The laity generally has not been educated along health lines to the extent that they are not still looking for something mysterious or miraculous along the line of healing. There is still a certain amount of witchcraft in the human race. The health program that was put on in Georgia this year if continued for a few years will do much good in eradicating superstitions and bringing about a better understanding between the people and the profession. We will have to convince the public that we really are interested in their staying well. When we do this, then we can pass the Basic Science Bill, which would be almost ideal. At present it would be impossible to pass it.

I think the plan Doctor Elrod suggested, to have all practitioners register with the State Board of Health is an excellent one, and also that they should conduct the prosecution of illegal practitioners.

As long as the judges and solicitors hold court in



the same district in which they are elected by the people just so long will illegal practitioners thrive.

In the Ninth District there is one of the most colossal quacks I have ever heard of, a self-styled Indian doctor who never saw the inside of any kind of school of healing. He can scarcely read, and yet his place out in the woods looks like a camp meeting every day, lined with automobiles some of them coming for fifty or a hundred miles. After a very hard effort of the medical profession of the county where he lives, he was tried in the courts, where he plead guilty to practicing without a license, and was fined \$200.00 and a six months sentence in the chain gang if he did not discontinue. That sentence was imposed more than a year ago, but he continues to practice.

This case convinces me that some means of law enforcement will have to be employed other than the usual methods now employed in the various counties. When the physicians in a county take the initiative in a prosecution, the people begin to accuse them of jealousy and trying to monopolize the art of healing.

I would like to add to Doctor Elrod's recommendations that judges and solicitors be rotated in such a way that they will not hold court in a county that helped to elect them.

I feel that he has given us a splendid paper, one that is very timely, and one that merits the consideration of every physician in Georgia.

**Dr. Theodore Toepel**, Atlanta, Ga.—I congratulate Doctor Elrod on presenting a paper which is so entirely unselfish. It deals with the fundamentals of the Medical Association of Georgia. He cannot hope to get any patients sent to him on the strength of his paper. It is really a contribution because he loves our Association. We should always have a paper of this type at our annual session. It was done once before and should be done again.

In the many recommendations which are excellent these facts stare us in the face, that our members are not sufficiently interested in the affairs that help out the Association at large but do not help us individually. The attitude is a little alarming and more such papers should be read, especially in the county and district societies. There should never be a district meeting without these fundamental things being brought to our attention. The Committee on Public Policy and Legislation will have ample work if it carries out only 50 per cent of the recommendations made by Doctor Elrod. The work that is being done is a reflection on our own Society and the laws that are on the statute books of our State.

Securing the good will of the people of the State by lectures and clinics, I think, is one of the best methods of getting suitable legislation in the future. The citizens will thus become able to discriminate between good and bad of their own accord. We must educate the public and prevent the enactment of laws such as have been placed on our statute books.

I wish to stress what Doctor Ayers has already said, concerning the annual registration of all practitioners. That should take place and we should take steps toward

having it done, and no doctor should mind the little inconvenience such registration will cause him. I think it would be an excellent plan to have closer cooperation between the State Board of Health and our Committee on Public Policy and Legislation and the Committee, or Board of Medical Examiners. If these three could meet occasionally during the year I think they would find a great deal to do for the common good of the Medical Association of Georgia.

**Dr. Charles C. Hinton**, Macon, Ga.—I think it is the Committee on Public Policy and Legislation whose attention should be called to the infringements the osteopaths are making. There are four in Macon and I have the word of three that they get their supply of codein and morphine and that the prescriptions are honored by druggists. That is because the Federal Government gives them the privilege of prescribing these, without any distinction between them and the regular physicians, although the Georgia laws do not permit it.

**Dr. J. O. Elrod**, Forsyth, Ga. — (Closing.) — Speaking of what Doctor Hinton has just said, I do not know that we can do anything with the osteopaths for prescribing narcotics so far as the Federal law is concerned. I do not know what their law is, but our Georgia laws do not permit osteopaths to prescribe any drugs whatever and our Committee on Public Policy and Legislation could prosecute these men who are prescribing drugs of whatever nature. If we could get a jury to convict according to the law those men could be convicted. As Doctor Fitzhugh of Boston said at the Congress on Licensure, in Chicago, the legislative bodies and citizens in general are not inclined to do anything with any person unless he has made some gross error and a very bad mistake. It is very hard to convince anyone on those things. As I told you a while ago, it took a jury two and one-half hours to find a man guilty after the judge had instructed them what their verdict should be. It all comes back to educating the people. The chiropractors are not permitted to do obstetrics or practice surgery, but the osteopaths are permitted to do anything except prescribe drugs. As the law stands on the statute books they are examined on more things than the regular practitioner of medicine. The only thing that is left out is the prescribing of drugs. It comes back to the fact that in the law governing these things it is as much the duty of one as another to see that they are enforced. Our law has been upheld in every court when the cases have come up, but it takes money to do these things. No man will be prosecuted for carrying a revolver or for shooting a man unless someone sees that this is done.

This is the point I tried to bring out, that we need someone to carry into effect the laws which we already have.

The Federation Bulletin in its October number states that there is an increase in medical students and graduates this year over last.



## PRENATAL CARE\*

JOHN A. HUNNICUTT, JR., M. D.  
*Athens*

Some years ago Dr. Harvey Cushing made the following statement: "It has been a seeming paradox that the medical profession has so consistently endeavored to make of the world a place where there is a constantly lessening need for the medical man."

A strict application of Cushing's remark would have to do with the thorough education of the people in matters of public health.

The United States has been typically American in trying to carry out the details of the job of health education of the masses. Our government, now paternalistic in the extreme, through its bureau of labor is broadcasting information for the expectant mother, seeking to better her health during the prenatal period.

So far the rank and file of doctors have been satisfied to sit and watch the game from the side lines reduced to utter impotency by the shackles of timidity, foolish tradition and false modesty.

Public health clinics from A to Z treat the people and do many things which rightfully are the duties of the general practitioner and specialist.

We have not given our patients a square deal if in the past we have neglected the thorough and continuous care of the expectant mother.

It has been very easy to make the simple deduction that if it is good to employ means of making babies healthy after birth it is better still to have them come into the world in a healthy condition thus reducing to a minimum the work involved in the postnatal care of their health.

I fully realize that in the average case of obstetrics the financial remuneration is in no way proportional to the services rendered and the responsibility involved.

It is a matter of simple business to inform our patients that our charges will include prenatal, confinement, and post confinement care. We should tell our patients that in order to reduce foetal and maternal morbidity and

mortality and lessen the hazards of pregnancy and confinement everything possible will be done and that our charges will be much larger than formerly because of the increased amount of services rendered.

Proper prenatal care includes everything that a doctor can do to eradicate existing disease in the expectant mother and to maintain her in a splendid state of body health and vigor.

A careful history should be taken and a physical examination should be made to discover existing disease.

The examination should be thorough and include the head, teeth, nasal passages, throat, chest (lungs and heart) and blood, blood pressure, breasts, abdomen, pelvic measurements and extremities.

The urine should be examined repeatedly and the blood pressure determined at regular intervals. Blood pressure determinations are especially important.

Any existing disease or abnormality should be immediately treated and treated continuously.

We should try to make of every expectant mother a woman admirably adapted for pregnancy and child-bearing, or as nearly so as possible.

Lack of time forbids my mentioning the many details involved in proper prenatal care.

I will call your attention to the following cases:

I. A 40-year-old primipara, well nourished, robust in appearance, and in the second month of pregnancy with a blood pressure of 130/90, gave a history of frequent headaches. The urine showed a trace of albumen with low specific gravity. Early in the eighth month her blood pressure rose to 140/92 and her urine showed 2 plus albumen. Her headache became continuous. Despite rest in bed, a modified diet and forced water by mouth her blood pressure rose to 155/94 and her headache increased in severity. She was given castor oil and quinine and had an uneventful delivery. Her urine is now free from albumen.

2. A primipara, 21 years old, frail and anaemic in appearance, weighed 90 lbs. Her hemoglobin was 60%. She was given a diet rich in vitamins and by the 7th month her hemoglobin had risen to 85%. She gained 30 pounds during her pregnancy and had a normal delivery of a healthy child.

3. A twenty year old primipara in the second month had a rash on arms and trunk. The blood Wassermann was strongly positive. Twelve intravenous injections of neosalvarsan and twelve intramuscular injections of potassium bismuth tartrate in 1 gr. doses

\*Read before the Eighth District Medical Society, Washington, Ga., August 13, 1930.

were given, with potassium iodide and bichloride of mercury by mouth. The Wassermann was negative 2 months after delivery. She had a normal healthy child with negative Wassermann.

4. A 21-year-old primipara in the 2nd month with pale sallow complexion complained of feeling chilly. She had been visiting in a malarial region of south Georgia, and examination showed a double tertian malarial infection. Although large doses of quinine were given by mouth and intravenously she did not have a miscarriage. Chills and fever of the greatest severity were present for 4 or 5 weeks. Iron cacodylate was given intravenously and she was given very nourishing food. She had a large post-partum hemorrhage immediately after delivery, but the child was normal and healthy. She takes quinine for 6 weeks twice a year. Her second pregnancy was uneventful.

5. A 22-year-old primipara in the 2nd month gave a history of pain and frequency of urination with pyuria. There was tenderness on pressure along the course of the right ureter during attacks. This pyelitis and ureteritis was treated with sodium citrate, urotropin and hexylresorcinol by mouth with a disappearance of pus and symptoms. She had a normal delivery and a healthy child.

## MENINGOCOCCUS ENDOCARDITIS\*

### WITH A REVIEW OF THE LITERATURE

EVERT A. BANCKER, JR., M. D.

*Atlanta*

Invasion of the endocardium by the meningococcus is rare when one considers the large number of cases of meningococcus meningitis occurring and the septicemic nature of the disease. Only twenty-five cases of meningococcus endocarditis are to be found in the literature and eight of these cases occurred in the epidemic of meningitis now raging in Indianapolis. Smithburn<sup>1</sup> and his colleagues, in reporting the epidemic, stated that eight of the 144 cases studied clinically developed endocarditis, showing an incidence of 5.5 per cent. No details in regard to those cases developing endocarditis were given.

It is well known that during the mobilization for the World War severe epidemics of meningococcus meningitis broke out at many of the training camps. At Camp Jackson, South Carolina, 208 cases of meningococcus meningitis occurred during a severe epidemic. Herrick<sup>2</sup> in reporting the epidemic stated that only one case of meningococcus

endocarditis occurred. A positive blood culture was obtained from this patient before death and at necropsy fresh vegetations were found upon the tricuspid valve. Baeslack, Bunce, et al.<sup>3</sup> studied twenty-five cases from the same epidemic and reported a positive blood culture in forty per cent of the cases.

Cabot<sup>4</sup> in a study of 180 cases of endocarditis reported a positive necropsy blood culture in eighty cases, none of which proved to be caused by the meningococcus.

The meningococcus may cause extrameningeal lesions but these lesions are not always associated with infection of the meninges. Ker<sup>5</sup> reported a case of meningococcus conjunctivitis without any lesion elsewhere.

In only seventeen of the twenty-five cases of meningococcus endocarditis reported were details of the disease given. The youngest patient in the series was one year old while the eldest was fifty-three years of age. Twenty per cent of the patients were in the third decade. Forty per cent of the patients had no meningitis associated with the endocarditis. Fifty-six per cent of the cases had positive blood cultures. The average duration of the disease was two weeks; two patients died in the first five days of the disease and one patient lived four months. None of the patients recovered.

Until the present epidemic in Indianapolis, meningococcus endocarditis was considered fatal but Smithburn et al. stated that a few of their eight cases recovered. However, they failed to state how many. In the report of the physical examinations in the cases found in the literature, eight or fifty per cent of the cases had a systolic murmur audible at the apex of the heart. In two cases a presystolic murmur was present at the apex, and in three cases a diastolic murmur was heard over the aortic area and at necropsy vegetation and ulceration were found upon the leaflets of the aortic valve. In nine or sixty per cent of the cases the mitral valve leaflets were found at necropsy to be the seat of vegetations and ulcerations, and in two cases only were the tricuspid valves affected.

(See Table 1)

The first proved case of meningococcus endocarditis was reported by Warfield and Walker<sup>6</sup> in 1903. The patient, a negro man, aged 32, was admitted to the hospital in a

\*Read before the Atlanta Clinical Society, September 24, 1930.

# MENINGOCOCCUS      ENDOCARDITIS

CASE NO.	MENINGITIS	AGE YEARS	DURATION of DISEASE	VALVES AFFECTED	HEART SOUNDS-MURMURS	BLOOD CULTURE	OUTCOME of DISEASE	REPORTED BY
1	NO	32	2 WEEKS	MITRAL	SYSTOLIC APEX	POSITIVE	FATAL	WARFIELD and WALKER <sup>6</sup>
2	YES	9	5 WEEKS	MITRAL	?	NOT DONE	FATAL	WEICHSELBAUM and GHON <sup>8</sup>
3	YES	1	3 WEEKS	MITRAL	?	NOT DONE	FATAL	WESTENHOEFFER <sup>9</sup>
4	YES	21	5 DAYS	MITRAL	?	NOT DONE	FATAL	WESTENHOEFFER <sup>9</sup>
5	NO	31	2 WEEKS	MITRAL	SYSTOLIC PRESYSTOLIC	POSITIVE	FATAL	CECIL and SOPER <sup>10</sup>
6	YES	47	3 WEEKS	MITRAL AORTIC	SYSTOLIC APEX	POSITIVE	FATAL	FINLEY and RHEA <sup>11</sup>
7	NO	19	12 WEEKS	MITRAL	SYSTOLIC APEX	POSITIVE	FATAL	MACKARELL <sup>12</sup>
8	YES	53	16 WEEKS	MITRAL	?	NOT DONE	FATAL	MACKARELL <sup>12</sup>
9	YES	?	?	MITRAL + AORTIC	?	NOT DONE	FATAL	FAIRLEY and STEWART <sup>13</sup>
10	YES	?	?	MITRAL	?	NOT DONE	FATAL	FAIRLEY and STEWART <sup>13</sup>
11	NO	37	5 WEEKS	AORTIC	SYSTOLIC-DIASTOLIC	POSITIVE	FATAL	WORSTER-DROUGHT and KENNEDY <sup>14</sup>
12	NO	21	2 WEEKS	TRICUSPID AORTIC	PRESYSTOLIC SYSTOLIC DIASTOLIC	NOT DONE	FATAL	RHODS <sup>7</sup>
13	YES	28	2 WEEKS	MITRAL	SYSTOLIC-MUR. + THRILL	POSITIVE	FATAL	MACMAHON and BURKHARDT <sup>15</sup>
14	NO	46	2 WEEKS	AORTIC	DIASTOLIC	POSITIVE	FATAL	HYLAND <sup>16</sup>
15	YES	43	2 DAYS	NONE	NO MURMURS	POSITIVE	FATAL	MOLEEN and SEECOF <sup>17</sup>
16	YES	?	?	TRICUSPID	SYSTOLIC APEX	POSITIVE	FATAL	HERRICK <sup>2</sup>
17	(ORIGINAL REPORT NOT AVAILABLE - SEE REFERENCE)							MASSA <sup>18</sup>

Table I





Fig. 1. Photograph of the right side of the heart showing a large, rounded vegetation projecting from the inner surface of the auricle and the tricuspid valve. Under the vegetation there has been necrosis of the interventricular septum with perforation through to the aortic valve.

state of delirium, having been ill for two weeks with chills, fever and headaches. Two weeks later he died and at necropsy acute ulcerative endocarditis, mitral stenosis, infarcts in the spleen and kidneys and chronic nephritis were found.

My attention was first drawn to this disease in 1927 when I observed the case reported by Rhoads.<sup>7</sup> The patient, a male negro laborer, twenty-one years of age, was admitted to my service at the Boston City Hospital, complaining of dyspnea and chills which he had suffered for the past two weeks. The positive findings upon examination were

as follows: The pharynx was moderately injected and there was advanced pyorrhea about all of the teeth. The point of maximum cardiac impulse was both seen and felt in the fifth intercostal space, eleven centimeters to the left of the mid-sternal line. A fine thrill was felt over this area. The right border of dullness extended two centimeters to the right of the mid-sternal line. The supracardiac dullness measured seven centimeters. A short presystolic murmur was heard at the apex. A loud blowing systolic murmur was also heard at the apex and was transmitted to the axilla and back. Over the aortic area

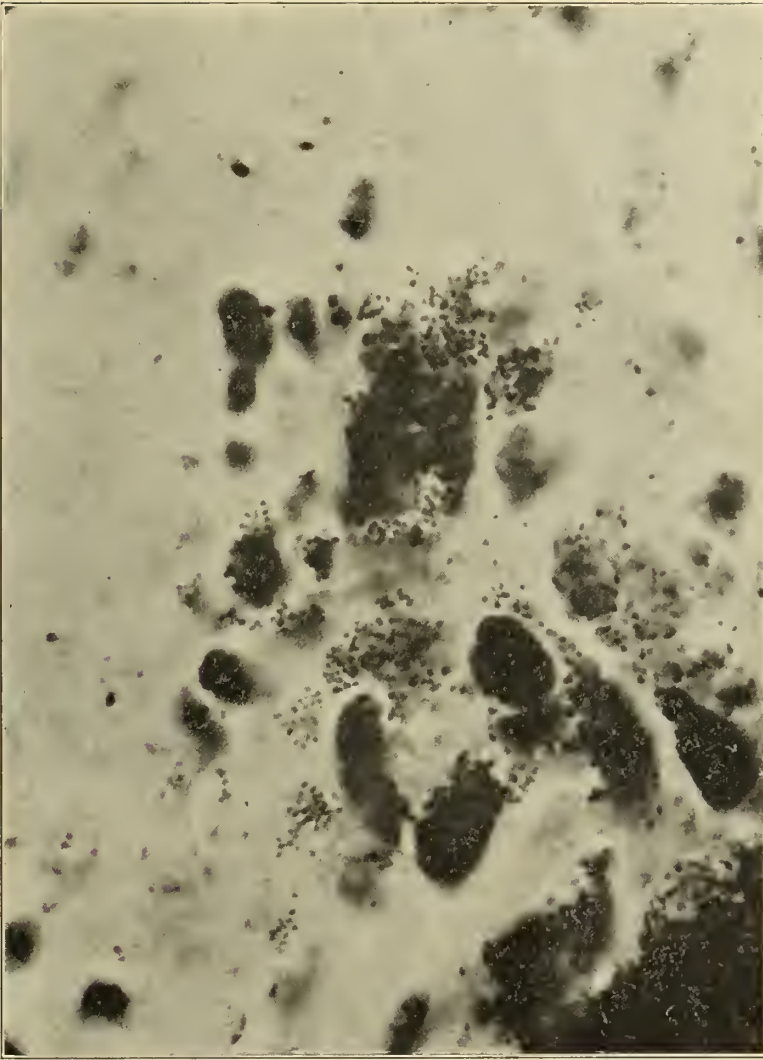


Fig. 2. Section through the base of a vegetation showing masses of organisms, many in phagocytic cells.

*Grateful acknowledgement is made to the American Journal of Pathology for the loan of all cuts used in this article.*

was heard a loud blowing diastolic murmur. The heart rate was regular at 140 per minute and the blood pressure was 140/0 in both arms. The pulse was Corrigan's type and visible pulsations were noted in the peripheral capillaries. The Duroziez murmur and the pistol-shot sound were heard upon auscultation over the femoral, brachial and popliteal arteries. There were no signs of meningitis and there were no petechiae on the body. The temperature was 101° and the respirations thirty-four a minute. The leucocyte count was 15,000 and the erythrocyte count 4,900,000. The urine contained a trace of albumen, and many red and white blood cells, and granular casts. The blood Wassermann and Kahn tests were negative. The clinical diagnosis was acute endocarditis with aortic regurgitation.

On the third day after admission he suddenly collapsed and died instantly. Following is the necropsy report: Necropsy performed one hour postmortem. The heart weighed 490 Gm. The epicardium was smooth and glistening. The myocardium showed no gross lesion. At the level of the tricuspid valve there was a vegetation 1.5 x 3 x 1 cm. protruding into the right ventricle (Fig. I). In the left ventricle just below the aortic cusps and on the septum there was an area of vegetation and erosion 2 x 2 cm. connecting with the right ventricle. The medial cusp of the aortic valve was ruptured inferiorly. A section from the vegetation showed a gram-negative diplococcus (Fig. II). The coronary arteries were normal. The edge of the liver was fourteen centimeters below the xiphoid cartilage and eight centimeters below



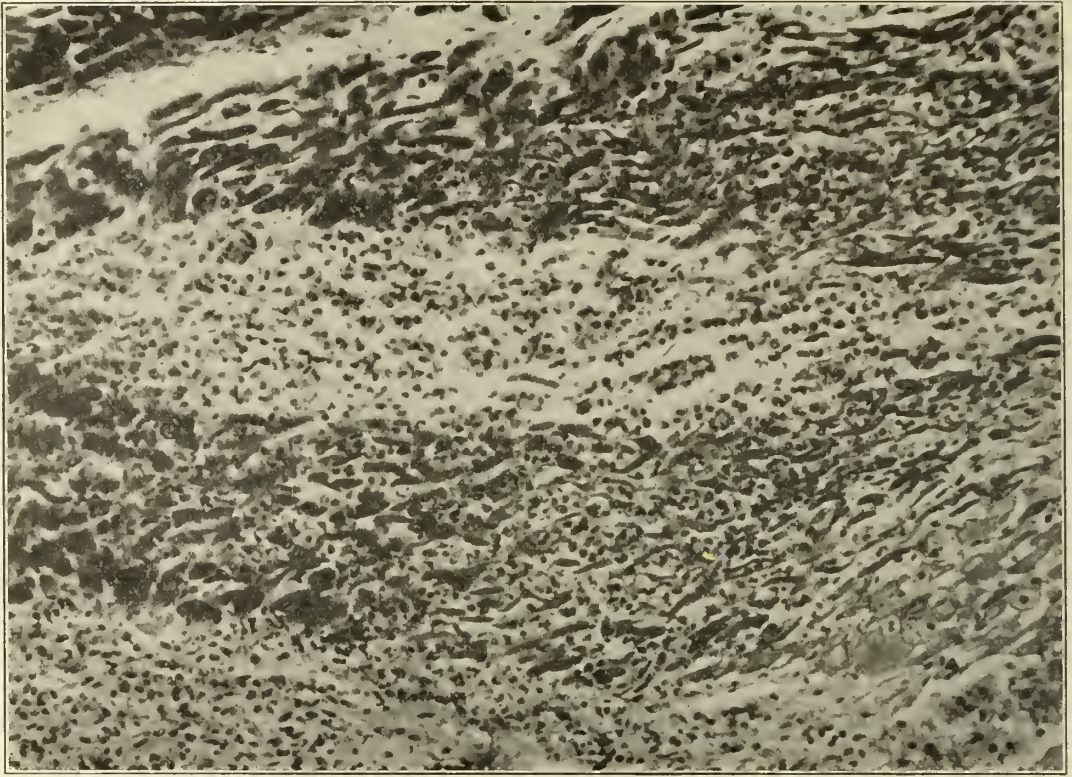


Fig. 3. Section through the heart muscle near the vegetations. It shows many necrotic muscle fibers and massive infiltration with polymorphonuclear leucocytes.

the costal margin in the right mid-clavicular line. The liver weighed 2360 Gm., the spleen 320 Gm., but multiple sections showed no gross lesion. The axillary, inguinal and mesenteric lymph nodes were enlarged. The right pleural cavity contained 300 cc. of straw-colored fluid and the left cavity 100 cc. The combined weight of the kidneys was 420 Gm. Both kidneys contained infarcts.

#### *Microscopic Report*

Between the muscle fibers of the heart were seen eosinophiles, lymphocytes, endothelial leucocytes and polymorphonuclear neutrophils (Fig. III). A few areas contained necrotic bundles of collagen fibers surrounded by endothelial leucocytes resembling Aschoff bodies as seen in acute rheumatic myocarditis (Fig. IV). There was extensive necrosis of muscle fibers with replacement by granulation tissue. Sections through the vegetations showed a mass of fibrin infiltrated with polymorphonuclear and endothelial leucocytes. There were masses of Gram-negative diplococci outside and within the cells.

#### *Bacteriology*

Smears of a vegetation grown forty-eight hours on sheep blood-beef infusoin agar plates showed a faint growth of pearly-gray, smooth, rounded, nonhemolytic colonies. The best growth took place on hydrocele agar. Smears from the vegetation and from cultures showed a pure growth of Gram-negative diplococci which were proved to be meningococci by controlled agglutination, precipitin and complement fixation tests.

#### *Summary*

1. Meningococcus endocarditis occurs as a clinical entity without associated infection of the meninges.
2. A review of the literature has been given.
3. The meningococcus produces lesions in the myocardium resembling those found in acute rheumatic myocarditis.
4. Meningococcus infection usually involves the mitral valve but rarely settles upon the tricuspid and aortic valves.
5. Death usually results within the first three weeks of the disease.



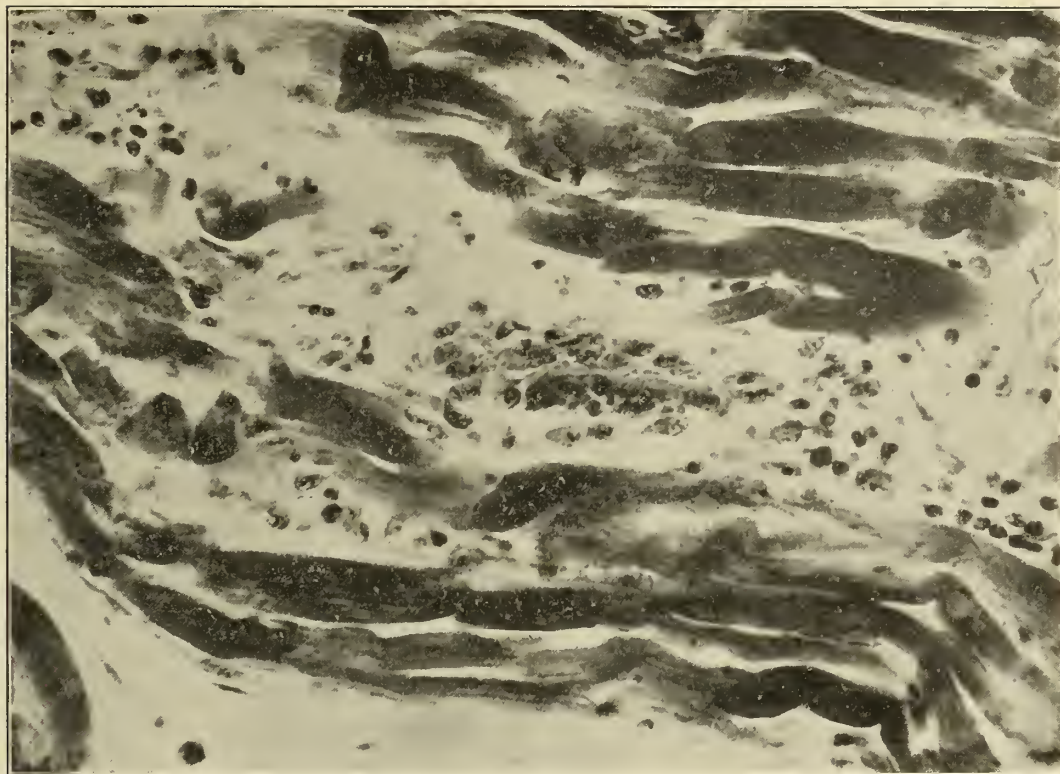


Fig. 4. Section taken through the muscle of the left ventricle near the coronary artery. Endothelial leucocytes are shown grouped around a strand of necrotic collagen. This formation strongly suggests an Aschoff body.

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#### RESULTS OF TONSILLECTOMY

Considering all the data from a ten-year follow-up study of tonsillectomized children, Albert D. Kaiser, Rochester, N. Y. (*Journal A. M. A.*, September 20, 1930), concludes that: The real value of the removal of tonsils and adenoids cannot be definitely established in a few years. Apparent benefits during the first few post-operative years are not so evident over a ten-year period. Outstanding benefits are apparent in influencing the incidence of sore throats over a ten-year period. Substantial benefits are apparent in rendering children less susceptible to scarlet fever and diphtheria. Acute head colds and otitis media, though definitely lessened over a three-year period, are not essentially influenced over a ten-year follow-up period. Cervical adenitis is decidedly reduced in tonsillectomized children over a ten-year period. The respiratory infections, such as laryngitis, bronchitis, and pneumonia, not only are not benefited but actually occur more frequently in tonsillectomized children. First attacks of rheumatic manifestations occur from 30 to 50 per cent less often in tonsillectomized children. The greatest reduction occurs in children tonsillectomized early. Recurrent attacks are not benefited at all. Incomplete tonsillectomies do not offer the same protection against the usual throat complaints and infections as complete removal of tonsils. The late results seen in 2,200 children ten years after operation are evident only in the reduction of sore throat, cervical adenitis, otitis media, scarlet fever, diphtheria, and rheumatic fever and heart disease.

**THE JOURNAL**

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

NOVEMBER, 1930

**CANCER**

Today cancer takes a higher toll in human lives than any other condition except heart disease. Whether there is an actual increase in the incidence of cancer remains to be determined. Two important factors must be considered in this question: first, due to medical progress and improved conditions of living, more persons live to enter the cancer age, and second, with modern methods, the diagnosis is probably much more often accurate.

In recent years cancer has been studied intensively by many scientists. The results of this research, however, have thrown little light upon etiology. The theory of "cell-rests" has been interesting, but hardly helpful in the fight against this dread disease. The germ theory has been almost universally rejected. Chronic irritation has been accepted as a predisposing factor in some cases. The chimney-sweep's cancer of the scrotum was one of the earliest observations in support of this theory. Cancer of the tongue is often associated with sharp, ragged teeth. Probably many skin cancers are due to the exposure of poorly cleansed skin to the hot sun.

However, due to the intensive scientific investigation, much has been learned of the pathology of cancer. With the increase in knowledge of pathology, the improvement in roentgenologic technic, and the discovery of the effect of radium on tumor cells, progress has been made in diagnosis and treatment. Cancers on the surface of the body can usually be recognized in their earliest stages, before metastasis has developed. Abnormal masses near the surface, as in the breast, can often be recognized early, too. Deep-seated tumors, as in the gastro-intestinal tract, demand more elaborate procedures. The ex-

pert roentgenologist, if given an opportunity, can often diagnose carcinoma of the stomach while it is still in the curable stage. However, statistics from the Steiner Clinic and elsewhere indicate that cancer of the stomach has often caused symptoms many months before it is recognized, and, in the majority of cases, it is then too late to excise the growth. So far serum tests have proved worthless in the diagnosis of cancer.

Lesions that can be reached are best diagnosed by removing a small piece of tissue and submitting it to a competent pathologist. The reliability of the report depends upon the preparation of the section and the experience of the interpreter. The history of the tumor may be of great value in outlining treatment and giving the prognosis. Immature cells with many mitotic figures indicate a rapidly growing tumor which will metas-

*The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.*

tasize early and widely. The neoplasm made up of cells approaching the adult type grows more slowly and secondary glandular involvement is usually later.

The prognosis in all cases of cancer should be regarded as serious, for, if the entire growth is not destroyed, there will be recurrence. Treatment has not yet been perfected, so a number of types of treatment have been tried and each type still has some advocates. Unfortunately there is no constitutional treatment worthy of mention.

From all scientific cancer institutions, surgical removal, radium and x-ray, in the order named, are recommended for the treatment of cancer. Irradiation is especially recommended in the very cellular tumors, because the less differentiated the cell, the more sensitive it is to irradiation either by radium or x-ray, and the poorer the results with excision. The reverse also obtains.

CALVIN B. STEWART, M.D.



# QUO VADIS?

Yes, I have been to the Big Town, Chicago. In order to see some of the big boys I went a day early to avoid the rush. These boys keep up pretty well with what is going on and they realize that, if we do not watch and help we will soon find ourselves in a tight place.

Do you know that there is a bill, House Bill No. 7884, Senate Bill No. 4497, entitled "To prohibit experiments upon living dogs in the District of Columbia," and providing a penalty for violation thereof. It has been favorably reported and comes up for passage in December. Note that the bill refers to dogs only and applies to the District of Columbia only. If it passes "it shall be a misdemeanor for any person to experiment or operate in any manner whatsoever upon any living dog, for any purpose other than healing or curing of said dog, in the District of Columbia".

There are three medical schools in the District and there are several departments of the Government devoted to science located there. The passage of this bill would interfere with their valuable work. This is but the entering wedge and the anti-vivisectionists expect to introduce similar bills in many States next year. Now it would mean that we have no more anti-toxin or other serological aids.

See, write, or wire your representative and senator and ask that they kill this bill. Give them the title and number.

A. G. FORT, M.D.,  
*President-elect.*

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## COUNTY AND DISTRICT SOCIETIES

### ELEVENTH DISTRICT MEETING MINUTES MEETING HELD AT QUITMAN, GEORGIA, TUESDAY, OCTOBER 14, 1930

Meeting Called to Order—Dr. E. L. Jelks, Quitman.

Invocation—Rev. Mr. Smith, Pastor Methodist Church, Quitman.

Welcome Address—Dr. E. L. Jelks, Quitman.

Response—Dr. B. H. Minchew, Waycross.

#### SCIENTIFIC PROGRAM

1. Expansion of Full Time Health Work into Every County in Georgia by Forming Health Districts—Dr. M. E. Winchester, Director, Division of County Health Work, Atlanta.

2. Hematuria in Longevity—Dr. Samuel J. Sinkoe, Atlanta. Discussion—Dr. W. F. Reavis, Dr. Floyd, Dr. W. R. Dancy, and Dr. S. J. Sinkoe.

3. Paper—Dr. E. F. Thompson, Valdosta. Discussion—Dr. Smith, Dr. Davison, Dr. E. F. Thompson.

4. Injection Method of Treating Varicose Veins—Dr. W. L. Pomeroy, Waycross. Discussion—Dr. Wall, Dr. J. R. McMichael.

5. Mucous Colitis—An Entity—Dr. W. R. Dancy, Savannah. Discussion—Dr. Davison, Dr. A. Griffin, Dr. S. J. Sinkoe, and Dr. W. R. Dancy.

6. Talk on Organized Medicine—Dr. G. Y. Moore, President of Medical Association of Georgia, Cuthbert.

Business meeting.

Reading and adoption of minutes of former meeting.

Election of Officers—Dr. E. L. Jelks, President; Dr. Tom H. Smith, Vice-President; Dr. W. F. Reavis, Secretary and Treasurer.

Valdosta selected as next meeting place. Recess taken at this time followed by dinner and Special Entertainment at Hotel General Quitman—Guests of Brooks County Medical Society and Auxiliary 6:30 p. m.

Respectfully,

W. F. REAVIS, M. D.,  
Secretary.

#### NEW MEMBERS

Allison, Gordon G., Atlanta.  
Cross, John B., Atlanta.  
Fincher, Ed F., Jr., Atlanta.  
Jones, W. W., Atlanta.  
Lavender, J. R., Plains.  
Smith, Simon H., Atlanta.

## 1930 HONOR ROLL\*

### COUNTY SOCIETIES

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 5, 1929.

2. Barrow County, Dr. W. L. Mathews, Winder, December 5, 1929.

3. Dougherty County, Dr. I. M. Lucas, Albany, December 28, 1929.

4. Lamar County, Dr. J. M. Rogers, Barnesville, January 6, 1930.

5. Turner County, Dr. J. H. Baxter, Ashburn, February 10, 1930.

6. Monroe County, J. O. Elrod, Forsyth, February 18, 1930.

7. Wayne County, Dr. A. J. Gordon, Jesup, March 20, 1930.

8. Stephens County, Dr. C. L. Ayers, Toccoa, April 2, 1930.

9. Upson County, Dr. R. L. Carter, Thomaston, April 3, 1930.

10. Lowndes County, Dr. Bennett G. Owens, Valdosta, May 5, 1930.

11. Ware County, Dr. W. L. Pomeroy, Waycross, May 21, 1930.

12. Cobb County, Dr. L. L. Welch, Marietta, August 2, 1930.

13. Crisp County, Dr. J. N. Dorminy, Cordele, September 6, 1930.

14. Terrell County, Dr. Logan Thomas, Dawson, September 13, 1930.

## 1931 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 4, 1930.

\*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

## ASSOCIATION OF CARCINOMA OF TONGUE AND SYPHILIS

In ninety-two cases of cancer of the tongue reported on by George H. Belote, Ann Arbor, Mich. (*Jour. A.M.A.*, June 21, 1930), sero-positive evidence of syphilis occurred in 29.3 per cent. Contrasted with a 5 per cent incidence in general hospital registrations and 7.2 per cent incidence in cancer generally, this figure establishes a definite close relation between syphilis and cancer of the tongue as presumptive cause and effect. In the group studied, patients with syphilis developed cancer of the tongue on an average eight years earlier than did the nonsyphilitic patients. Leukoplakia as a forerunner to cancer occurred twice as frequently in the syphilitic as in the nonsyphilitic cases. The high incidence of syphilis in cancer of the tongue in our group did not hold true for female patients. If this group should be left out, the incidence of syphilis and cancer would be increased to 34.7 per cent.

# GEORGIA STATE NURSES ASSOCIATION

## Officers

President—Miss Lucia Massee, R. N., Cuthbert.  
 First Vice-President—Miss Dora A. Kershner, R. N., Macon.  
 Second Vice-President—Mrs. Mae M. Jones, R. N., Milledgeville.  
 Secretary—Miss Winnie B. Wood, R. N., Macon.  
 Treasurer—Miss Jane Van De Vrede, R. N., Atlanta.

Miss Jane Van De Vrede, R. N.  
 Executive Secretary

## District Presidents

First—Mrs. Dorothy Treacle, R. N., Savannah.  
 Fourth—Miss Eva Chalkley, R. N., Columbus.  
 Fifth—Mrs. Sue B. Paille, R. N., Atlanta.  
 Sixth—Miss Dora A. Kershner, R. N., Macon.  
 Seventh—Miss Shirley Hamrick, R. N., Cedartown.  
 Eighth—Mrs. W. C. Thurmond, R. N., Athens.  
 Ninth—Miss Ruby Falls, R. N., Gainesville.  
 Tenth—Mrs. Joseph Akerman, R. N., Augusta.

## Headquarters

131 Forrest Avenue, N. E., Atlanta.

## GEORGIA NURSES HOLD TWENTY-FOURTH ANNUAL MEETING

What might be termed a 'double keynote' was sounded at the 24th annual convention of the Georgia State Nurses' Association, held in Atlanta, October 27-28-29, when "Better Preparation and Performance, and Better Distribution of Nurses and Nursing Service" was stressed.

Nurse educators, doctors and lay people joined with members of the nursing organization in making the convention one of if not the most successful held in the history of the G. S. N. A., which dates back to 1907.

Guest speakers were Miss Nina D. Gage, of New York, executive secretary of the National League of Nursing Education, who came to represent the headquarters of the three national nursing organizations; Miss Laura R. Logan, of Chicago, Dean of the Cook County Hospital School of Nursing, and a former president of the N. L. of N. E.; Miss Shirley C. Titus, Dean of the Vanderbilt University School of Nursing, Nashville, Tenn., and former vice-president of the National League; Miss Carrie M. Hall of Boston, also a former president of the National League, who came to represent the Harmon Association plan of annuities for nurses, and Miss Ida F. Butler of Washington, D. C., assistant to the national director of Red Cross Nursing Service, who attended the Red Cross session of the convention and was the principal speaker at the luncheon of Red Cross Nurses on Tuesday, October 28th.

Dr. G. Y. Moore of Cuthbert, Ga., president of the Medical Association of Georgia, was a guest and speaker. He attested the

friendly relations existing in this State between physician and nurse, and pledged the continued support of the Medical Association in endorsing "such measures as lead to better and more nursing care of our people, and to assist in establishing a higher ethical performance of duties and more satisfying personal rewards in their doing". He urged some form of centralized courses of instruction with extension courses in the small hospitals, in the interest of better preparation of nurses.

Dr. R. C. Swint, superintendent of the Milledgeville State Hospital, discussed the Mental Disease Problem, especially as relating to the State of Georgia, emphasizing the importance of studying the individual as related to the whole. The dominant note was the importance of keeping emotionally fit. Dr. Swint outlined the scope of the problem and gave State statistical data as well as some of the theoretical expectations formulated from the Mendelian Law as applying to mental disease. He stressed need of sterilization laws, citing the 23 States now having such laws on their statute books.

## Three Annual Meetings in One

The Georgia State Nurses' Association, the Georgia League of Nursing Education and the State Organization for Public Health Nursing met jointly in convention, as has been the custom since organization of the Georgia League and the S. O. P. H. N. in 1926. The Ansley Hotel was headquarters, and all sessions were held there except the Monday evening meeting, at the First Methodist Church.

Miss Lucia Massee, President, presided over all sessions of the Georgia State Nurses' Association, including the evening meeting which

was open to the general public. About 750 persons attended.

Mrs. Eva S. Tupman, President of the Georgia League, presided over the one session of that organization, and Miss Emma Habenicht presided over the meetings of the public health nurses.

The League opened the convention Monday morning, October 27th, Rev. Ernest Risley, assistant rector St. Luke's Church, pronouncing the invocation. Greetings from the president followed. Mrs. Tupman also gave her annual address at this time.

"The University School of Nursing" was discussed by Miss Shirley C. Titus, Dean of the Vanderbilt University School of Nursing, Nashville, Tenn. Miss Titus said that the sole purpose of university education is to make a better nurse, and in contemplating a university school of nursing there were three essentials to be considered: (1) Higher standards of admission. (2) The Strengthening of the faculty of the school of nursing. (3) The strengthening of clinical experience. Miss Titus said she believed there should be one or two university schools of nursing in every State, to prepare women for administration and supervision in teaching. She does not, however, believe that every nurse needs a university education.

Miss Jane Van De Vrede, Secretary-Treasurer of the State Board of Examiners and Executive Secretary of the Georgia State Nurses' Association gave the annual report of the Board's activities at the League session. It dealt with the nursing situation in Georgia, particularly as related to the various schools of nursing, and included a number of recommendations.

Miss Van De Vrede said that an analysis of the distribution of graduate nurses qualified to practice in the State for 1930 indicated fifty-nine counties in the State with no registered nurses residing therein, and thirty-seven counties with only one nurse; while only four of the 161 counties in Georgia have over 100 nurses qualified to practice. However, that in Greater Atlanta, which includes Decatur and other boroughs, there is one graduate, registered nurse for 355 persons of the population; and that in other centers, such as Augusta, Savannah and Macon almost the same ratio applies. "Naturally

there is serious unemployment among nurses in our cities", said Miss Van De Vrede. "Of the 3,317 nurses qualified to practice in Georgia, at this time, 680 are engaged in institutional, office, public health or other salaried occupations. 455 are not engaged in nursing. Private duty nurses practicing number 2,282. All nurses and especially superintendents of nurses, should give serious thought to the question, and wherever possible graduate nursing service should augment student service, so as to avoid the increase in number of student nurses. We should seriously consider whether as nurses and principals of schools of nursing we are doing all we can to assist in solving the problems connected with the maintenance of schools and the extension of nursing services to the community."

Miss Van De Vrede's report indicated that students entering training in Georgia have a better educational foundation than formerly, due to higher standards of the schools.

"Extra Curricular Activities" was the subject of a discussion led by Miss Minnie B. Bass, superintendent of nurses, Wesley Memorial Hospital, Emory University, Ga., during the League session. Miss Bass was followed by Miss Carrie C. Spurgeon, assistant superintendent of nurses at Wesley Memorial Hospital. Miss Gage, Miss Titus, Miss Elizabeth Horne and Miss Nancy Dell Jenkins also participated in discussion of this subject, and the point brought out was that a well rounded nurse must have the benefit of such extra activities, both from an educational and recreational standpoint.

Senior student nurses from several of the Atlanta training schools presented a play entitled "A Syncopated Health Trial", by Miss Hazel McGee Bowman, and a gymnastic drill, as a closing feature of the League program.

More than one hundred nurses assembled for the luncheon following. Miss Massee presided and Miss Gage was the guest speaker. She was introduced by Miss Alice F. Stewart, a vice-president of the G. S. N. A. and superintendent of nurses of the University Hospital, Augusta. Miss Gage and Miss Stewart are fellow alumnae members as graduates of Roosevelt Hospital, New York.

Mrs. Tupman was re-elected as president of the Georgia League during the election of



officers for the ensuing year. She has served continuously as president since 1926.

Mrs. Mae M. Jones of Milledgeville, Ga., was also re-elected as treasurer, and Miss Minnie B. Bass of Wesley Memorial Hospital and Miss Elizabeth Horne of the Georgia Baptist Hospital were elected Directors of the League.

### *Private Duty Section*

The Private Duty Section meeting Monday afternoon, October 27th, was one of the most interesting sessions of the entire convention. Miss Eva Chalkley, of Columbus, presided. Some of the subjects treated were "The Nurse and the Physician", Dr. G. Y. Moore, President of the Medical Association of Georgia; "Problems of Continuing Education While Doing Private Duty", Miss Frances Blakely of Rome; "Making the Most of One's Life", Mrs. Sue B. Paille, Atlanta, President of the Fifth District of the G. S. N. A.

Mrs. S. B. Whittier of Chattahoochee, Ga., presented "Seeing Ourselves as Others See Us" in a way which delightfully reflected both the bright and dark side of the picture.

Miss Jean Harrell of Atlanta, Chairman of the Registry Committee of the Fifth District Association, presided over a round table on The Registry. Her paper outlined the purpose of the official registry—to meet community needs for efficient nursing service; and she emphasized the need of a well organized registry, giving service to the public, the physician and to hospitals as well as nurses—a central bureau from which all nursing services should be dispensed; a placement bureau for nurses seeking executive, industrial, office and other positions.

Miss Dora A. Kershner of Macon, representing the Sixth District Registry, discussed "The Uncalled Nurse", and Mrs. Mamie Lou Clapp of Savannah, read a paper "What the Official Registry Means to the Private Duty Nurse." Mrs. Clapp said the Registry is exactly what the nurses themselves make of it—a success or failure in proportion to the amount of loyalty, work and cooperation extended or exchanged between the nurses and the officials.

Mrs. E. P. Grant of Rome, Ga., was elected Chairman of the Private Duty Section at the business session following the program. Mrs. Grant is Secretary of the Seventh District

Association, and was General Chairman of the 1929 convention of the G. S. N. A.

### *Miss Gage and Miss Logan Address Convention*

Miss Nina D. Gage and Miss Laura R. Logan were speakers on the program of the evening meeting, Monday, October 27th. This was held at the First Methodist Church, and Miss Lucia Massee, president of the State Association, presided.

Dr. Russell H. Oppenheimer, Dean of the School of Medicine, Emory University, gave the address of welcome, which was responded to in the form of greetings by Miss Jessie Candlish, superintendent of Eggleston Memorial Hospital, Atlanta.

Miss Gage gave an interpretation of nursing from the time of the ancients up until the present day, and of the progress made in nursing organization and nursing education; of the efforts made all along the line to improve schools and the education and performance of the nurse, and in attempting to teach people how *not* to get sick.

Miss Logan's topic was "Meeting the Challenge in Nursing". Data relating to the graduation of nurses from the year 1880 through 1929, showing the heavy increase in percentage as compared with the population of this country; and of the work of the Grading Committee in conducting its five-year survey to find out and make known vital facts pertaining to nurses and nursing, and to make recommendations for further preparation of the nurse.

Miss Massee gave her annual report and address at the beginning of the meeting, recounting "the time when to bring a graduate nurse into a home meant that the family thought the patient was going to die", and of how this has all changed and the nurse is now looked upon as an Apostle of Health.

She paid tribute to the nurses of Georgia who have worked long and tirelessly for the organization and for principles and higher standards, and told of sitting in on the Advisory Council at the Biennial, listening to reports from the various States; of how she realized many of these States were still hammering away at problems already solved by the wisdom and work of loyal leaders in this State. "But we still have problems—many of them. First, we should bring the 2,100 not now members within our fold. These Registered Nurses offer a distinct challenge to our Association. Then, we need to increase our subscriptions to *The American Journal of Nursing*—all nurses should read *The Journal*. Relief to nurses who have worn themselves out in service is another problem. Still another, and a vital one, is study of the distribution of nursing service."

In concluding, Miss Massee recited the old French legend of the Saint of the Holy Shadow who was granted a Miracle, unconsciously doing good in the world without knowing it. "We have a parallel in nursing. The sick and wounded soldiers at Scutari turned upon their beds to kiss the shadow of Florence Nightingale as it fell upon them, thus finding indeed a Holy Shadow."

Dr. Samuel T. Senter, pastor of the First Methodist Church, gave the invocation, and music was pro-

vided by Mrs. W. H. L. Nelms, organist, and Mrs. W. S. Eakin, soloist, of the choir of this church.

#### *Districts and Alumnae Make Reports*

District and alumnae reports from the eight districts comprising the Georgia State Nurses Association were heard at the Tuesday morning session of that organization. Interest and progress was manifest. More than one alumnae reported doing relief work in a systematic, businesslike way; committees working toward registries and better distribution of nursing service are being named in some of the newer districts; membership campaigns are being planned, and other efforts and problems being attacked in an enthusiastic way.

Reports of officers and committees were given and recommendations made. Miss Massee gave her report as delegate to the Biennial convention in Milwaukee, and Mrs. Elizabeth Crawford of Albany reported as a delegate to the State Conference on Social Work.

Miss Hattie Wilder gave a comprehensive report of the convention of the American Red Cross, held last spring.

After a brief business session, devoted principally to the appointment of committees, tellers, etc., the State Association merged into the Red Cross program. Miss Lillian Cumbee, State Chairman, presided and made her annual report. Local committee reports from Atlanta, Savannah, Augusta, and Macon were read.

Miss Ida F. Butler, assistant to the national director of Red Cross Nursing Service, was a special guest at this time and at the luncheon of Red Cross nurses which followed. She spoke of the fine work of the Red Cross and praised Southern nurses for their prompt response to appeals from this organization.

Miss Gail Macdonald, of Atlanta, presented Home Hygiene and Care of the Sick in a very interesting way. Miss Macdonald is one of the oldest instructors in point of service in the Red Cross, having been an itinerant instructor for the Southern Division until 1925. She is an enthusiast on the subject of "Home Hygiene" and is advocating it as a part of every high school curriculum. She is now teaching this subject in the Commercial High School, Atlanta, co-operating with the local chapter of the A. R. C.

Miss Ruth Mettinger, nursing field representative of the A. R. C. for Georgia and Florida, was another guest of the Red Cross Nurses and of the convention. She discussed "The Red Cross in Georgia". Miss Mettinger, who is considered "one of the family" in the State Association, also took part in the program of the S. O. P. H. N.

At the luncheon which followed this session, Miss Butler, Miss Gage, Miss Van De Vrede, Miss Mettinger, and other Red Cross Nurses were informal speakers.

#### *Nurse "Specialists" Have Session*

Office nurses, technicians, anaesthetists, and other "specialists" in nursing service came together as a group, for the first time, under the auspices of the G. S. N. A. on Tuesday afternoon, October 28th. Miss Massee presided and introduced the speakers.

Dr. R. C. Swint, from the State Hospital, dis-

cussed Georgia's mental disease problem, and papers were given by Miss Hortense Marion, Atlanta, surgical assistant to Dr. Michael Hoke, and by Miss Sarah Dicey, also of Atlanta. Miss Marion's topic was "The Relation of the Nurse to Orthopedics" and Miss Dicey's "Educational Opportunities of the Office Nurse".

#### *State Organization for P. H. N.*

The public health nurses of Georgia came together on Wednesday morning, beginning with a breakfast at 7:30 o'clock. A session for business followed from 8:30 to 9:30, Miss Emma Habenicht presiding.

Demonstration of a pre-school visit was the first feature of the program and was given by Miss Helen Hatch, with the assistance of Mrs. Perry Shumate and little Mary Ellen Shumate, a real "pre-school" mother and child.

"School Nursing" was the subject of a round-table discussion conducted by Miss Lillian Alexander, director of nursing service for the city of Atlanta. Miss Virginia Gibbs of Marietta, Ga.; Miss Ruth Mettinger; Miss Helen Bond, of Savannah; Miss Ruby Falls, of Gainesville, and Mrs. Dorothy Treacle, of Savannah, participated in this discussion.

"Hourly Nursing" was the subject of another round table, discussion being led by Miss Ruth Mettinger, who said that in several cities in the State hourly nursing had been started under the visiting nurse association. Mrs. Olive Barbin, of Augusta; Miss Falls, Mrs. Mazie Mallard, of Savannah; Mrs. Mamie Waters Clapp, also of Savannah; Miss Jean Harrell, of Atlanta, and others participated. Miss Helen Bond, director of the Savannah Health Center, summed up the discussion.

Miss Ada Whyte, representative of the Georgia Tuberculosis Association and of the State Tuberculosis Sanatorium at Alto, presented the program of these institutions.

An election of officers for the ensuing year was held before the close of the public health session, when Miss Lillian Alexander, of Atlanta, was named president, succeeding Miss Emma E. Habenicht, who has served the S. O. P. H. N. since 1928. Other officers elected were Miss Virginia Gibbs, first vice-president; Miss Emma E. Habenicht, second vice-president; Mrs. Evelyn Richards, secretary, and Miss L. Carey Jones, treasurer. Mrs. Mary Brownloe and Miss Maude Ashmore, both of Atlanta, were elected as nurse members of the Board, and Mrs. A. C. Vernoy as non-nurse member.

#### *G. S. N. A. Goes to Savannah in 1931*

The closing session of the G. S. N. A. came on Wednesday afternoon, with an election of officers to serve the coming year in those positions made vacant by virtue of ruling or amendment to by-laws adopted in 1929. Miss Massee will continue to serve through 1931. Miss Dora A. Kershner, of Macon, was elected first vice-president and Miss Winnie B. Wood, also of Macon, as secretary. Each will serve two years. Miss Beulah Carrington, of Dalton, was named counselor to serve for the next four years.

A number of resolutions were adopted by the organization. These included a resolution asking the



co-operation of the Medical Association of Georgia, through the county medical societies, to increase the use of graduate nursing service. This came largely as a result of the survey of the nursing situation, revealed in report of the secretary of the State Board, and of recommendations by the Executive Board in advocating a study regarding the distribution of nursing service.

Another important resolution, in which the State Association was joined by the Georgia League of Nursing Education, asked that a request be made of the Board of Trustees of the Milledgeville State Hospital for the provision of post-graduate and elective affiliate courses in psychiatric nursing.

The State Association voted to launch a state-wide membership campaign early in 1931 as marking the twenty-fifth year of the organization, and to accept the invitation of the city of Savannah to meet there for a "Silver Jubilee" celebration. This is especially fitting since Savannah was the birthplace of the G. S. N. A. and the cradle of Georgia history.

Memorial resolutions for Miss S. Lillian Clayton, Miss Linda Richards, and for the eight nurses who were members of the State Association and who passed away this year were also adopted. Miss Willie Livsey, whose untimely death came during the close of the convention, was included in this number. Miss Livsey's home was in Decatur, Ga., but she had been doing industrial nursing at LaGrange, Ga.

After reading of minutes and adjournment, members visited local hospitals, where special clinics were being held.

#### *Nurses Visit Stone Mountain*

A visit to Stone Mountain was arranged for the visitors by the alumnae of Piedmont Hospital, which provided bus transportation and escort, at the close of the Tuesday afternoon meeting.

On Monday afternoon the members of the Woman's Auxiliary to the Fulton County Medical Society poured tea at the Academy of Medicine on Prescott Street in honor of visiting delegates and guests of the Association; and Tuesday evening the annual banquet was held in the Ansley. Miss Lillian Cumbee presided as toastmistress, and the guest list included the several distinguished nurse leaders attending the convention and a number of doctors and their wives, members of the County, District, and Southern Medical Associations, and of the auxiliaries to such organizations. The banquet was followed by dancing on the roof garden of the hotel.

An informal reception in honor of visiting delegates and to doctors, local nurses, and to members of the American Hospital Association, returning from the convention of that organization, held in New Orleans the week of October 19th, was held on Sunday afternoon, October 26th, on the Ansley roof. Miss Lillian Alexander was chairman of arrangements and was assisted by Fifth District nurses, who acted as hostesses. Miss Nancy Dell Jenkins, superintendent of the Georgia Baptist Hospital, Atlanta, was chairman of arrangements for the convention.

## WOMAN'S AUXILIARY

### *Committees and Managers*

#### STUDENT EDUCATIONAL COMMITTEE 1930-1931

Mrs. W. R. Shearouse, Savannah, Chairman.

Three-Year Term: Mrs. Lee Howard, First District, Savannah, Ga., Treasurer; Mrs. W. J. Cranston, Tenth District, Augusta, Ga.; Mrs. J. L. King, Sixth District, Macon, Ga.; Mrs. Marion Benson, Fifth District, Atlanta, Ga.

Two-Year Term: Mrs. Stewart Brown, Eighth District, Royston, Ga.; Mrs. C. L. Ayers, Ninth District, Toccoa, Ga.; Mrs. E. B. Claxton, Twelfth District, Dublin, Ga.; Mrs. G. Y. Moore, Third District, Cuthbert, Ga.

One-Year Term: Seventh District, Vacant; Mrs. Enoch Callaway, Fourth District, LaGrange, Ga.; Mrs. Gordon, Chason, Second District, Bainbridge, Ga.; Mrs. B. H. Minchew, Eleventh District, Waycross, Ga.

Note: You will see that the whole committee has to be appointed this year. After this year the members will be chosen for three years.

#### COMMITTEE ON PUBLIC RELATIONS 1930-1931

Chairman, Mrs. J. K. Quattlebaum, Savannah; Mrs. Chas. E. Waits, Atlanta; Mrs. W. A. Selman, Atlanta; Mrs. J. E. Mercer, Vidalia; Mrs. Jas. B. Dillard, Davisboro; Mrs. Chas. C. Hinton, Macon.

#### COMMITTEE ON HEALTH EDUCATION

Mrs. S. T. R. Revell, Louisville, Chairman; Mrs. T. H. Johnston, Athens; Mrs. M. B. Allen, Hoschton; Mrs. J. D. Applewhite, Macon; Mrs. V. H. Bassett, Savannah; Mrs. A. T. Coleman, Dublin; Mrs. W. H. Garrison, Clarksville; Mrs. Herschel Smith, Americus.

#### DISTRICT MANAGERS

First District, Mrs. L. F. Lanier, Sylva, Ga.

Second District, Mrs. Gordon Chason, Bainbridge, Ga.

Third District, Mrs. Thad. Wise, Americus, Ga.

Fourth District, Mrs. Enoch Callaway, LaGrange, Ga.

Fifth District, Mrs. Dan Sage, 47 Inman Circle, Atlanta, Ga.

Sixth District, Mrs. Wallace Bazemore, Beverly Place, Macon, Ga.

Seventh District, Vacant.

Eighth District, Mrs. D. N. Thompson, Elberton, Ga.

Ninth District, Mrs. C. B. Almond, Winder, Ga.

Tenth District, Mrs. Jas. B. Dillard, Davisboro, Ga.

Eleventh District, Mrs. H. G. Huey, Homerville, Ga.

Twelfth District, Mrs. W. E. Beddingfield, Rentz, Ga.



# BOOK REVIEWS AND ABSTRACTS

## BOOK REVIEWS

*Constitutional Inadequacies*, an Introduction to the Study of Abnormal Constitutions, by Nicole Pende, M. D. Translated by Sante Naccarati, M. D., Ph.D., with a foreword by George Draper, M. D.

Illustrated, 268 pages. Lea & Febiger, Philadelphia. Price, \$3.50.

In the foreword of this book Dr. Draper makes the statement that "new knowledge may be merely the offspring of a marriage between past and present". This seems to be the hope offered by the renewed study of Constitution and the great part played by hereditary predisposition in the development of certain diseases. This author builds his concept of Constitution on the single inseparable concept of individuality with its component parts of constitution, character, temperament, morphology or habitus, physiology, biochemistry, and psyche. These are determined primarily by the laws of heredity and secondarily by the disturbing influences exercised by the environment upon the individual's hereditary plan of organization. He distinguishes six principal diathesis that comprise all morbid temperaments; (1) arthritic; (2) neuro-endocrinopathic; (3) psychopathic; (4) heredo-syphilitic; (5) heredo-tuberculous; (6) heredo-neoplastic.

The first portion of the book is given over to a review of existing theories and opinions with the elaboration of a system of nomenclature. This is somewhat wordy and constitutes the least interesting portion of the text.

The work is interesting theoretically and suggests rather than proves many relationships in pathology that should be recognized by the clinician. Such a point of view would well serve to clarify many problems in diagnosis.

J. C. M.

*International Clinics*. Fortieth Series, Vol. 1, (April 1930) and Vol. II. (June 1930). Edited quarterly by Henry W. Cattell, A.M., M. D., and collaborating authors.

Published by J. P. Lippencott, Philadelphia. Subscription price, \$1.00 per month.

The contributors to these volumes include Drs. Donald C. Balfour, Lewellys F. Baker, B. Bickel, Thomas Brown, Robert Colgan, Edwin G. Conklin, George F. Dick, E. D. Friedman, A. G. Gibson, Allen A. Goldbloom, Eli Goldstein, I. W. Held, Fredrick Tilney, P. E. Truesdale, Max Trumper, F. Parke Weber, and Russell Wilder. The subjects covered include Prof. Barker's Clinic, Diagnosis and Treatment, Medicine, Medical Questionnaires, Medical Trend, Toxicology, Progress of Medicine, Surgery, Humanology, etc.

The articles are well prepared and illustrated, covering subjects of interest to the general practitioner, presented by some of the outstanding men in medicine of today.

J. C. M.

*Diseases of the Skin*. A Textbook for Practitioners and Students, by George Clinton Andrews, A. B., M. D. Associate Professor of Dermatology, College of Physicians and Surgeons, Columbia University; Consulting Dermatologist and Syphilologist to Tarrytown Hospital; to St. John's Hospital, Yonkers; to Grassland's Hospital; and to the Broad Street Hospital, New York City; Fellow of the New York Academy of Medicine, of the American Medical Association, and of the American College of Physicians; Member of the American Radium Society, of the New York Roentgen Society, and the Manhattan Dermatological Society. Paper. Price, \$12.00. Pp. 1,091, with 988 illustrations. Philadelphia and London. W. B. Saunders & Co. 1930.

Lack of comprehensive text-book on skin diseases including the recent advances in dermatologic chemotherapy, and the use of mechanical agents such as x-ray, radium and electricity was no doubt the incentive for this timely and useful volume. The author's style is simple and direct, always dealing specifically and critically with the subject at hand. Repetition and wordiness are conspicuous by their absence.

The chapters dealing with the use of the x-ray, x-ray and surgical diathermy, are worthy of comment, not only because of the excellence of presentation, but also because these chapters included in a text-book of dermatology, have filled a void so noticeable in most books of this kind.

It is refreshing to find that the author has given more space to detailed instructions as to treatment and less to quibbling over names and minute pathological differences. One cannot turn the pages of this volume in the most superficial way but be struck by the general excellence of the photographs. The author should be commended for the clearness and comprehensiveness of his photographic exposition of the syphilodermata.

This volume is particularly recommended to the general practitioner, especially to him who is occasionally called upon to treat skin diseases with radium or x-ray, and to students of medicine. The large chapter bibliographies alone commend this book to the specialist in skin diseases.

H. S. ALDEN, M.D.

*Collected Papers from the Mayo Clinic and the Mayo Foundation*, Vol. XXI, 1929. Philadelphia. W. B. Saunders Co., 1930.

This volume maintains the high standard expected from the Mayo Clinic. Originally each paper published was reprinted in the *Collected Papers*. In recent years the editorial policy has been altered: 90 articles are given in full, 23 abridged, 68 abstracted, and 290 are mentioned by title only. This prevents much overlapping and materially enhances the value of the book.

The surgeon will expect to find new ideas as to technic illustrated beautifully and in detail: he will

not be disappointed. Statistical papers as usual will help the man who sees but a limited number of cases. The work of Barnes and Whitten on the coronary circulation is important. Willius' "Digitalis in Clinical Medicine" is of great practical value. Perhaps the most valuable papers are found in the realm of physiology. When surgery is largely a matter of reducing fractures, specific remedies take care of what preventive medicine lets slip by, and neurotic persons are promptly submitted to euthanasia, it is more than possible that little of the present volume except the studies in physiology will be of other than historical interest.

While no physician will be interested in each article, every doctor will be able to find a number that he is interested in. A specialist can not be thoroughly up-to-date without the latest from the Mayo Clinic in his field, and a review of this book will keep the general man from falling far behind the procession.

It is true that the present volume contains no such work of genius as Henry Plummer's Beaumont Lecture on the Thyroid Gland. Genius is a rare commodity,—even at the Mayo Clinic, and such epoch-making papers do not often appear in the literature of the world. However, after the rigid process of selection they have been through, each paper included is worthwhile.

L. M. B.

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*Disease and the Man*, by George Draper, M. D., Associate Professor of Clinical Medicine, Columbia University. 270 pages. Price, \$4.50. New York, The Macmillan Company, 1930.

To the average physician, about the only thing in the world less interesting than anthropology is its subdivision, anthropometry. If Dr. Draper's former work on anthropometry (*Human Constitution*, Philadelphia, W. B. Saunders Co., 1924), was a bit technical, the present volume scintillates. No more thoroughly delightful book has ever brightened and broadened this reviewer's horizon. *The Journal of the American Medical Association* has published many excerpts, and these should serve to whet one's appetite.

The clinicians of yesteryear, it would seem, based their diagnoses largely on appearances, and their treatment largely on psychology. With the tremendous strides of scientific medicine, the value of their work gave way to a tendency on the part of many to over-emphasize the purely scientific: a tendency to lose sight of the imponderables, if not to ignore their existence; a tendency to take account of little that was not demonstratable by instruments of precision; in short, a tendency to make "cases" out of sick persons.

Dr. Draper believes that "disease arises from the interplay of dynamic forces inherent in the individual and present in the world about him." One can not therefore study a disease properly without an intensive study of the individual who has the disease. Study of a man from only one point of view gives a lopsided picture. Draper returns to the Aristotelian principle that each individual is a unit, one and indivisible. He believes in a study of what the patient brought into the world with him. In these days of "Behaviorism",

it was a real pleasure to note that Draper is bold enough to insist upon the importance of heredity as well as of environment. The importance of bodybuild is stressed. There are charming chapters on the psychologic responses in patients with certain types of disease.

Rather than attempt to epitomize the morphologic, physiologic, immunologic and psychologic panels, the reviewer would urge every doctor to read this book, as much for his entertainment as for his edification.

L. M. B.

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*Primer on Fractures*, by Co-operative Committee on Fractures, American Medical Association, 1930.

As the title implies, this little book takes up the more common types of fractures of the extremities, and shows by illustration, charts and legends the fundamental principles that underly the treatment of each. It contains much sound advice and outlines briefly but clearly the things to do and not to do in the management of fractures.

For the past few years at the annual meetings of the American Medical Association there have been demonstrations on the treatment of fractures. The committee that has been in charge of the demonstrations is made up of the most outstanding men in the country, on fracture work. In this book you have in a condensed form, what, in the opinion of these men, is an acceptable method of treatment for the more common fractures.

H. W. JERNIGAN, M.D.

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## COMMUNICATIONS

### *Narcotics*

#### *To the Editor:*

With the approval of the Board of Trustees of the American Medical Association, I write to urge the active cooperation of the Medical Association of Georgia with the Federal Commissioner of Narcotics and the proper officers of your own State in their efforts to suppress the abuse of narcotic drugs.

It was solely through the efforts of the American Medical Association that Congress recently authorized the cooperation between the Federal Government and the governments of the several States, by providing:

"That the Secretary of the Treasury shall co-operate with the several States in the suppression of the abuse of narcotic drugs in their respective jurisdiction, and to that end he is authorized

(1) to co-operate in redrafting of such legislation as may be needed, if any, to effect the end named, and (2) to arrange for the exchange of information concerning the use and abuse of narcotic drugs in said States and for cooperation in the institution and prosecution of cases in the courts of the United States and before the licensing boards and courts of the several States. The Secretary of the Treasury is hereby authorized to make such regulations as may be necessary to carry this section into effect." *An Act to create in the Treasury Department a Bureau of Narcotics, and*

for other purposes, approved June 14, 1930, Section 8.

The influence of the Medical Association of Georgia in promoting the establishment of effective cooperation as contemplated by the act will go a long way, it is believed, toward determining whether the legislation that the American Medical Association proposed and sponsored will or will not be successful.

WM. C. WOODWARD, Director,  
Bureau of Legal Medicine and Legislation, American  
Medical Association.  
Chicago, October 30, 1930.

## ARTICLES ACCEPTED

To the Editor:

In addition to the articles enumerated in our letter of September 26th, the following have been accepted:  
Lederle Laboratories, Inc.

Diphtheria Toxoid.

Maltine Company.

Malitne with Cod Liver Oil and Iron Iodide.

The following articles have been exempted and included with the List of Exempted Medicinal Articles, (New and Nonofficial Remedies, 1930, p. 477).

E. R. Squibbs & Sons.

Tablets Digitalis Leaves—Squibb 1 Cat. Unit, (approximately 1 1/2 grains).

Tablets Digitalis—Squibb 1 Grain, (10 minims U. S. P. tincture).

COUNCIL ON PHARMACY AND CHEMISTRY.  
Chicago, October 24, 1930.

## TRUTH ABOUT MEDICINES

### *New and Nonofficial Remedies*

The following products have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in New and Nonofficial Remedies:

Amytal.—Isoamylethylbarbituric acid.—Amytal differs from barbital (diethylbarbituric acid) in that one of the ethyl groups of barbital is replaced by an isoamyl group. The actions and uses of Amytal resemble those of barbital. It is proposed as a sedative and hypnotic in the control of insomnia and as a preliminary to surgical anesthesia. Amytal is also supplied in tablets containing 1 1/2 grains. Amytal can be used before local or general anesthesia safely only by those who have had much experience and are familiar with the literature concerning such use. Eli Lilly & Co., Indianapolis.

Pulvules Sodium Amytal, 3 Grains.—Gelatin capsules ("pulgules") each containing 0.2 Gm. (3 grains) of sodium amytal, the monosodium salt of isoamylethylbarbituric acid. The actions and uses of Pulvules Sodium Amytal, 3 grains, resemble those of barbital. The product is proposed as a sedative and hypnotic in the control of insomnia and as a preliminary to surgical anesthesia. Pulvules Sodium Amytal, 3 grains can be used before local or general anesthesia safely only by

those who have had much experience and are familiar with the literature concerning such use. The pulvules may be administered by mouth or rectally. Eli Lilly & Co., Indianapolis. (Jour. A. M. A., October 18, 1930, p. 1178).

### *Foods*

The following products have been accepted by the Committee on Foods of the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in Accepted Foods:

Argo Corn Starch (Corn Products Refining Co., New York). A refined corn starch of high purity. It contains 86.95 per cent of starch. It yields 3.50 calories per Gm. (99.4 per ounce). Argo Corn Starch is proposed for use in puddings, custards, ice cream, a wide variety of desserts, in bakery products, and for thickening gravies, sauces, pie fillings, stewed fruits, etc.

Dromedary Golden Dates, Pitted and Plain (The Hills Brothers Co., New York). Pasteurized pitted or plain Mesopotamian dates in cartons. Selected Mesopotamian dates, pitted or plain, are washed, and pasteurized in ovens so that nonsporulating bacteria will not survive the treatment. Pits constitute 12.8 per cent of plain dates. The pitted dates contain protein, 1.7 per cent; fat, 1.9 per cent; total carbohydrates 73.0 per cent. Pitted dates yield 3.16 calories per Gm. (89.7 per ounce). It is claimed that the pasteurization makes these dates a safe food; they are an easily digested energy food for children and adults. (Jour. A. M. A., October 18, 1930, u. 1179).

To the Editor:

In addition to the articles enumerated in our letter of August 29th, the following have been accepted:

Eli Lilly & Co.

Amytal.

Pulvules Sodium Amytal, 3 grains.

Old Tuberculin, Human Strain, Concentrated, 2 vial packages.

McKesson & Robbins, Inc.

McKesson's Vitamin Concentrate of Cod Liver Oil.

E. S. Miller Laboratories, Inc.

Ampoule Sterile Solution Dextrose, U. S. P., 5 Gm., 10 cc.

Ampoule Sterile Solution Dextrose, U. S. P., 10 Gm., 20 cc.

Plant Products Co.

Plant's Magnesia Wafers.

The following articles have been exempted and included with the List of Exempted Medicinal Articles (New and Nonofficial Remedies, 1930, p. 477):

H. K. Mulford Co.

Pollen Extracts Diagnostic—Mulford.

COUNCIL ON PHARMACY AND CHEMISTRY.  
Chicago, September 26, 1930.

## TRUTH ABOUT MEDICINES

### *New and Nonofficial Remedies*

The following products have been accepted by the Council on Pharmacy and Chemistry of the American



Medical Association for inclusion in New and Non-official Remedies:

Gas-Gangrene Antitoxin (Combined) Refined and Concentrated—P. D. & Co.—An antitoxic serum prepared from the toxins of *B. perfringens* (*B. welchii*) and vibrio septique. The quantity of the finished product in the marketed syringes contains 100 units of each antitoxin. It is proposed for therapeutic use against gas-gangrene infection caused by *B. perfringens* and vibrio septique. It is marketed in syringes containing 100 units of perfringens antitoxin and 100 units of vibrio septique antitoxin. Parke, Davis & Co., Detroit.

Inhalant Chloretone, Creosote and Eucalyptol-Sorensen.—It contains chloretone (New and Nonofficial Remedies, 1930, p. 115) 1.2 Gm. (20 grains); creosote, 2.5 cc. (40 minims); eucalyptol, 3.75 cc. (60 minims); alcohol to make 30 cc. (1 fluidounce). C. M. Sorensen Co., Inc., Long Island City, N. Y.

Soluble Gelatin Capsules, Parke, Davis & Company's Standardized Cod Liver Oil, 10 minims.—Each capsule contains 10 minims of Parke, Davis & Company's Standardized Cod Liver Oil (New and Nonofficial Remedies, 1930, p. 256). Parke, Davis & Co., Detroit.

Soluble Gelatin Capsules, Parke, Davis & Company's Standardized Cod Liver Oil, 20 minims.—Each capsule contains 20 minims of Parke, Davis & Company's Standardized Cod Liver Oil (New and Nonofficial Remedies, 1930, p. 256). Parke, Davis & Co., Detroit.

Soluble Gelatin Capsules, Parke, Davis & Company's Standardized Cod Liver Oil, 2.5 Gm.—Each capsule contains 2.5 Gm. Parke, Davis & Company's Standardized Cod Liver Oil (New and Nonofficial Remedies, 1930, p. 256). Parke, Davis & Co., Detroit.

Soluble Gelatin Capsules, Parke, Davis & Company's Standardized Cod Liver Oil, 5 Gm.—Each capsule contains 5 Gm. of Parke, Davis & Company's Standardized Cod Liver Oil (New and Nonofficial Remedies, 1930, p. 256). Parke, Davis & Co., Detroit. (Jour. A. M. A., September 6, 1930, p. 729).

Quinine Bismuth Iodide.—A substance of variable composition containing between 18 and 20.1 per cent of bismuth, between 48.7 and 53.5 per cent iodine; and quinine. Quinine bismuth iodide is proposed as a means of obtaining the systematic effect of bismuth in the treatment of syphilis.

Sodium Potassium Bismuthyl Tartrate.—A basic sodium potassium bismuth tartrate containing from 40.75 to 41.25 per cent of bismuth. It is proposed as a means of obtaining the systemic effects of bismuth in the treatment of syphilis.

Tartro-Quiniobine.—A suspension of quinine bismuth iodide and sodium potassium bismuthyl tartrate in olive oil, each cc. containing quinine bismuth iodide, 0.072 Gm., sodium potassium bismuthyl tartrate, 0.032 Gm., and camphor, 0.003 Gm. It is proposed as a means of obtaining the systemic effects of bismuth in the treatment of syphilis. It is designed to secure both early action through the presence of water-soluble

sodium potassium bismuthyl tartrate, and prolonged action through the insoluble quinine bismuth iodide. It is supplied in 2 cc. ampules. Spicer & Co., Glendale, Calif. (Jour. A. M. A., September 13, 1930, p. 797).

## BOOKS RECEIVED

*A Practical Medical Dictionary* of words used in medicine with their derivation and pronunciation, including dental, veterinary, chemical, botanical, electrical, life insurance and other special terms; anatomical tables of the titles in general use, and those sanctioned by the Basle Anatomical Convention; pharmaceutical preparations, official in the United States and British Pharmacopoeias and contained in the National Formulary, and comprehensive lists of synonyms. By Thomas Lathrop Stedman, A. M., M. D., Editor of the "Twentieth Century Practice of Medicine," and of the "Reference Handbook of Medical Sciences," formerly Editor of the "Medical Record". Eleventh Edition, revised and illustrated. Contains 1,222 pages. Publishers: William Wood & Company, 156 Fifth Avenue, New York City. Price, \$7.50.

*Our New Progress*—Two Essays, Cornucopia and Caritas, by James Bayard Clark. "The significant thing in this book is the author's analysis of charity. He leads us from the beginning of this ancient custom to its crowning glory as witnessed in its modern dress of philanthropy. Those who have not given thoughtful attention to the subject of philanthropy as the possible silent partner of our new prosperity may come upon some picturesque—perhaps, even startling bits of social scenery in this small volume". Contains 128 pages. Publishers: G. P. Putnam's Sons, 2 West 45th Street, New York City. Price, \$2.00.

*Laboratory Medicine*.—A Guide for Students and Practitioners, by Daniel Nicholson, M. D., member of the Royal College of Physicians, London; Assistant Professor of Pathology, University of Manitoba; Assistant in Pathology, Winnipeg General Hospital. "This book provides all the detailed information on the indications, method and interpretation of the laboratory tests that every medical practitioner should be able to perform for himself. At the same time it outlines the principles of the more technical procedures usually performed for him by a laboratory and it assists him in the proper interpretation of the laboratory findings". Contains 437 pages with 108 engravings. Publishers: Lea & Febiger, Washington Square, Philadelphia, Penn. Price, \$6.00.

*A Text Book of Pathology*.—Edited by E. T. Bell, M. D., Professor of Pathology, University of Minnesota. Contributors: E. T. Bell, M. D., Professor of Pathology; B. J. Clawson, M. D., Professor of Pathology; Hal Downey, M.D., Professor of Dermatology; J. S. McCartney, M.D., Professor of Pathology and Neurology; C. J. Watson, Instructor in Pathology; University of Minnesota, Minneapolis, Minne-

sota. "Pathology must supply the knowledge of the nature and cause of disease on which all successful practice of medicine is based". Contains 627 pages with 316 engravings. Publishers: Lea & Febiger, Washington Square, Philadelphia, Penn. Price, \$8.00.

#### NEWS ITEMS

Dr. H. T. Compton, Savannah, read a paper before the (Chatham County) Georgia Medical Society on October 14th. The society will hold its regular meetings during the fall and winter on the second and fourth Tuesday evenings.

Dr. and Mrs. J. H. McClure, Cornelia, entertained the members of the Habersham County Medical Society and their wives at their home on October 3rd. The scientific program consisted of a paper, entitled "Ulcers of the Stomach", by Dr. Stewart D. Brown, Royston.

Dr. T. F. Abercrombie, Atlanta, Commissioner of Health, State of Georgia, shows in his semi-annual report that deaths from influenza were reduced 68 per cent; diphtheria showed a reduction of 21 per cent and pellagra 12 per cent during the past twelve months.

The doctors of Meigs entertained the members of the Thomas County Medical Society at a luncheon on October 14th. Dr. S. E. Sanchez, Barwick, President of the society presided, while an interesting scientific session was held.

The Barrow County Medical Society met at the Winder Hotel, Winder, on October 7th.

The Jefferson County Medical Society and the Woman's Auxiliary met at Hotel Jefferson, Louisville, on October 3rd. An informal program and banquet were the features of the meeting.

Dr. J. H. Campbell, formerly of Dubuque, Iowa, announces the opening of his office at 504 Southern Mutual Building, Athens. Practice limited to diseases of the eye, ear, nose and throat, bronchoscopy and esophagoscopy.

The Clarke County Medical Society held its monthly meeting at the Athens General Hospital, Athens, on October 9th.

Dr. Arthur G. Fort, Atlanta, President-Elect of the Association, Drs. W. E. Campbell, Jr., and Zach W. Jackson, of Atlanta, attended the meeting of the American Academy of Ophthalmology, Otolaryngology, Rhinology, held in Chicago during the week of October 27th. Dr. Fort visited the offices of the American Medical Association while in Chicago to discuss the general trend of medical affairs pertaining to organized medicine. Dr. W. E. Campbell, Jr., stood an examination before the American Board of Ophthalmology. Drs. Fort and Jackson have been members of the American Academy of Ophthalmology for a number of years.

The McCall Hospital, Rome, is preparing for another addition to its already well equipped fifty bed institution. Plans have been drawn for an annex to

connect with the recently completed north wing. The annex will be used for colored patients. This will give a separate entrance and will be so connected that they may be carried to the operating rooms or the x-ray. The Brookhaven Hospital, Rome, formerly used exclusively for colored people has been closed.

Dr. C. H. McArthur, Rome, returned recently from Europe where he took an intensive course in diseases of the eye, ear, nose and throat. He removed a rusty nail from the right bronchial tube of a child. Sodium Amytal was used as the anesthetic with excellent results. The most interesting point about the operation was that it had been in the child's bronchial tube for about two weeks and the child had a severe case of pneumonia. In making an x-ray of the child's chest at the McCall Hospital to ascertain why the pneumonia did not respond to treatment, the nail was located and removed with the use of a bronchoscope. The pneumonia subsided rapidly and the child recovered completely.

Dr. G. Y. Moore, Cuthbert, President of the Association, delivered an address before the twenty-fourth annual session of the Georgia State Nurses' Association in Atlanta on October 27th, entitled "The Nurse and the Physician".

The fourth annual series of lectures on the Care of Infants and Children were given at Wesley Memorial Hospital, Emory University, from October 7th to November 25th. Physicians who gave lectures, were as follows: Drs. W. W. Young, Roger W. Dickson, M. Hines Roberts, Wm. Willis Anderson, L. D. Hoppe, W. L. Funkhouser, all of Atlanta.

Dr. and Mrs. S. L. McElroy, Ocilla, entertained the physicians of Ben Hill and Irwin counties at their home on October 7th.

Dr. Richard Binion, Milledgeville, has been awarded fellowship in the American College of Surgeons.

The Georgia State Nurses' Association held its twenty-fourth annual session at the Ansley Hotel, Atlanta, October 27, 28, 29. Those who appeared on the program were as follows: Miss Minnie B. Bass, Director of Nursing, Wesley Memorial Hospital, Emory University; Miss Shirley C. Titus, Dean, Vanderbilt University School of Nursing, Nashville, Tennessee; Miss Frances Blakley, Rome; Mrs. Sue Paille, Atlanta; Mrs. S. B. Whittier, Chattahoochee, Ga.; Miss Jean Harrell, Atlanta; Mrs. Mamie Lou Clapp, Savannah; Miss Dorothy Kershner, Macon; Miss Jessie M. Candlish, Atlanta; Presidential Address by Miss Lucia Massee, Cuthbert; Miss Nina D. Gage, Executive Secretary, National League of Nursing Education, New York City; Miss Laura L. Logan, Dean, School of Nursing, Cook County Hospital, Chicago; Mrs. Elizabeth Crawford, Albany; Miss Sarah Dicey, Atlanta; Miss Hortense Marion, Atlanta.

The State Tuberculosis Sanatorium at Alto is the recipient of a valuable contribution by the Georgia Lodge of Masons, of Atlanta, in books valued at

\$758.00. It was stressed by Dr. T. F. Abercrombie, Commissioner of Health, that time hangs heavily on the hands of the patients at Alto and that good books go far toward the alleviation of the tedium with a consequent help to the physician in charge of the institution in effecting a cure.

The State Board of Health will begin work immediately on a \$3,700.00 school building at Alto for the children who are inmates of the tuberculosis sanatorium. Plans have also been approved for a similar building for the colored children.

Dr. M. T. MacAvelia, with offices formerly in the Hurt Building, Atlanta, has removed to Burlington, Washington.

Dr. Robert B. Crichton has opened an office at 1202 Medical Arts Building, Atlanta.

Dr. Cleveland Thompson, Millen, has been in Rochester, Minnesota, for several weeks taking a post-graduate course at the Mayo Clinic.

Dr. Geo. A. Williams moved his office to 126 Forrest Avenue, N. E., Atlanta.

The Spalding County Medical Society met at the Griffin Hospital, Griffin, on October 21st.

The Georgia Medical Society (Chatham County) met at the society's hall, 610 Drayton Street, Savannah, on October 28th. Dr. W. A. Norton read a paper entitled, "Spontaneous Rupture of the Liver."

Dr. Thos. J. McArthur, Cordele, was elected President of the State Board of Medical Examiners. Dr. B. T. Wise, Americus, was re-elected Secretary-Treasurer.

The Troup County Medical Society met at the Colonial Hotel, LaGrange, on October 23rd.

Dr. J. W. Simmons, Brunswick, delivered an address before the Rotary Club on October 14th, entitled "The Present Status of the Medical Profession and Its Relation to Numerous Regulatory Laws That Are Constantly Being Passed by State Legislatures."

The Georgia Urological Association held its semi-annual meeting at the Academy of Medicine, 38 Prescott Street, N. E., Atlanta, on October 30th. The following titles for case reports and papers made up the scientific program: CASE REPORTS. "Silent Stone in Left Ureter," by Dr. S. T. Brown, Atlanta; "Double Kidney," by Dr. S. A. Kirkland, Atlanta; "Congenital Anomaly of Kidneys in a Young Girl," by Dr. S. J. Sinkoe, Atlanta; "Angioma of the Bladder," by Dr. E. G. Ballenger, Atlanta; "Carcinoma of the Penis," by Dr. Earl Floyd, Atlanta; "Elimination of Prostatic Foci in the Treatment of Neuritis," by Dr. Colden R. Battey, Augusta; "Prostatic Calculi," by Dr. Wm. Shearouse, Savannah; "Gonorrheal Infection in an Infantile Kidney," by Dr. Wallace L. Bazemore, Macon. PAPERS: "The Urologist's Attitude Towards the Neuroses and Functional Disorders of the

Uro-Genital Tract," by Dr. H. W. E. Walther, New Orleans, La.; "Traumatic Lesions of the Urinary Organs," by Dr. Russell A. Hennessey, Memphis, Tenn.; "The Place of the Punch in Prostatic Surgery—Report of Fifty Consecutive Cases," by Dr. Owsley Grant, Louisville, Ky. A banquet was given at the Capital City Club.

The Burke County Medical Society held its monthly meeting in the office of Dr. R. L. Miller, in Waynesboro, on November 6th. Dr. J. M. Byne, Jr., Waynesboro, read a paper entitled "Coronary Thrombosis"; discussion led by Doctor Miller. Luncheon was served at the Anthony Wayne Hotel.

Dr. C. W. Roberts, Atlanta, delivered an address before the Safety Conference, sponsored by the Industrial Commission of North Carolina at High Point, on November 13th, entitled "The Estimation of Post-Traumatic Industrial Disability, with Special Reference to Causative Factors".

A National Conference on Child Health and Protection was held in Washington, D. C., on November 19th. Representatives of organized child welfare work from every State were invited.

The New York State Department of Social Welfare is interested primarily in the child who needs the special care and protection of the State by reason of physical or mental infirmity, poverty, neglect or delinquency. The organization is making an effort to give to the unfortunate or underprivileged children the care and opportunities they lack.

## OBITUARY

*Dr. Jesse Monroe Anderson*, Columbus; Member; University of Georgia Medical Department, Augusta, 1899; aged 55; died at a private sanatorium at Asheville, N. C., on October 12, 1930. He was born and reared at Shiloh, Harris county, Georgia. Dr. Anderson served in the medical corps during the World War. Surviving him are his widow and one son, Dr. Lee Anderson of Brooklyn, N. Y. Funeral services were conducted in Washington, D. C., and interment in Arlington, our national cemetery.

*Dr. Charles D. McRae*, Rochelle; University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Md., 1889; aged 66; died at his home on October 3, 1930. He served at one time as Commissioner of Roads and Revenue of Wilcox county and served two terms in the General Assembly of Georgia from 1912 to 1916. Dr. McRae was a member of the Presbyterian Church. Surviving him are his widow, one sister, Mrs. Florence McArthur; two brothers, F. M. and L. C. McRae, all of Mount Vernon. Funeral services were conducted from the home and interment in Rochelle cemetery.



*Dr. James Howard Elder*, Athens; Emory University School of Medicine, Emory University, Ga., 1775; aged 77; died at his home on Hall Street, October 3, 1930. He was born and reared in Clarke County and had resided in Athens for more than twenty-five years. Surviving him are his widow, three daughters, Mrs. L. W. Holmes, Athens; Mrs. Jim Jones and Mrs. Charlie Jones, Atlanta; one son, L. D. Elder, Athens. Funeral services were conducted from the First Methodist Church of Athens by Dr. Lester Rumble and interment in Oconee cemetery.

*Dr. James A. Summerlin*, Pelham; Member; Gate City Medical College, Texarkana-Dallas, Texas, 1907; aged 52; died at a private hospital in Thomasville on October 7, 1930. He was born and reared in Sparks. Dr. Summerlin lived at Hartsfield for a number of years and later moved to Pelham. He was held in high esteem by a wide circle of friends and stood well in his profession. Surviving him are his widow, one son, three daughters, one sister, and two brothers. Funeral services were conducted from the Baptist Church and interment in Pelham cemetery.

#### IN MEMORIUM—DR. E. T. GIBBS

On July 2, 1930, our Father saw fit to take from our midst our beloved Dr. E. T. Gibbs. He had lived in Gainesville for about twenty-one years, and during this time had won many loyal friends, built a large practice and was a success in every undertaking.

He was always active in his church, civic and medical affiliations.

After graduating at Mercer University, he began the study of medicine at the University of Maryland, College of Physicians and Surgeons, where he graduated in 1906, and served as an interne. Later, he took a post-graduate course in medicine at Harvard University. The foregoing shows that Dr. Gibbs was a scholar as well as an eminent physician.

He was a member of the First Baptist Church; of the Hall County and State Medical Societies, American Medical Association and Rotary Club.

Dr. Gibbs was born and reared at Social Circle, Ga., where he was, at the time of his departure, from heart trouble.

He leaves behind a widow, one son, James Hurst Gibbs, one daughter, Elizabeth Colquitt Gibbs, of Gainesville; one brother, John M. Gibbs, of Social Circle; three sisters, Miss Ethlene Gibbs and Mrs. E. E. Cowan of Social Circle, and Mrs. Helen Fournoy of Chattanooga, Tenn.; his mother, Mrs. Fannie L. Gibbs of Social Circle, and a host of friends who will always cherish his memory.

Funeral services were conducted at his mother's home by his pastor, Dr. Roland Q. Leavell, and interment was in the city cemetery of his native home, Social Circle, Ga.

H. S. TITSHAW, M. D.

Gainesville, Ga.

#### MEAD'S VIOSTEROL IN OIL

Mead's Viosterol in Oil is now designated 250 D because in deference to Dr. Henry Steenbock—and in the interest of uniform nomenclature—this product is now assayed by his method. Before October 1, 1930, this same product was assayed by the McCollum-Shibley method and was designated 100 D.

Mead's Viosterol in Oil, 250 D (Steenbock method)—in normal dosage—is clinically demonstrated to be potent enough to prevent and cure rickets in almost every case. Like other specifics for other diseases, larger dosage may be required for extreme cases. It is safe to say—based upon extensive clinical research by authoritative investigators (reprints on request)—that when used in the indicated dosage, Mead's Viosterol in Oil, 250 D is a specific in almost all cases of human rickets, regardless of degree and duration, as demonstrated serologically, roentgenologically and clinically.

The change in Mead's Product is in designation only—not in actual potency. Mead's Viosterol in Oil, 250 D—in proper dosage—continues to prevent and cure rickets.

#### ABBOTT LABORATORIES AND SWAN-MYERS COMPANY JOIN FORCES

In order to enlarge the strong research facilities and personnel of the Abbott Laboratories and Swan-Myers Company, to expand the sales organizations and increase the distribution of their ethical pharmaceutical products, the Abbott Laboratories of North Chicago, Illinois, and the Swan-Myers Company, of Indianapolis, Indiana, have agreed to combine their resources and consolidate their management. This combination brings into one enlarged organization two groups of people actuated by the same high standards in ethics, scientific research and controlled manufacture. Alfred S. Burdick, President of the Abbott Laboratories, states that among those to join the active management of the combined companies in North Chicago are R. M. Cain, who will be Vice-President, in charge of Sales; Edgar B. Carter, Director of Biological Laboratories, and O. C. Durham, in charge of Pollens and Allergy products, A. E. Snyder, C. R. Jackson and others. The Swan-Myers business was organized in 1909. It has grown very rapidly and enjoys a fine reputation for its high class line of Ephedrine products, Bacterial Vaccines, Ampules, Pollens and Pollen Extracts and Intravenous Solutions, Dextrose and other Ampules, ophthalmic and nasal ointments, glandular and keratotic products and other specialties. Its Ephedrine Inhalant "66" was the first plain inhalant to be accepted by the Council on Pharmacy and Chemistry of the American Medical Association. E. H. Volwiler, Chief Chemist of the Abbott Laboratories, becomes a member of the Board of Directors; also James F. Stiles, who has been elected Treasurer, and Edmund L. Drach. S. DeWitt Clough becomes Vice-President and F. W. Scheigert, Secretary. The laboratories of the Swan-Myers Company will continue to be operated in Indianapolis until further notice.

## PRESENT STATUS OF NONSPECIFIC THERAPY

Joseph L. Miller, Chicago (*Jour. A. M. A.*, August 16, 1930), asserts that protein therapy has been employed in nearly all acute and chronic diseases of supposed bacterial origin. At present it is used especially in acute polyarthritis, gonorrheal arthritis, the infectious type of chronic arthritis during the period of more or less active inflammation, acute iritis, corneal ulcer, thrombo-angiitis obliterans, bacillary dysentery, dementia paralytica, and multiple sclerosis. Probably the most dramatic results are observed in acute polyarthritis, and it is safe to say this is the only method of treatment that can immediately terminate this disease; at least 50 per cent of patients can be promptly relieved of their discomfort. About one-half of them are cured; the others, after a few days or occasionally a week or more, have a recurrence. In the others the immunity is complete. In the early stages of chronic atrophic arthritis, in which there is marked evidence of inflammation, this treatment will occasionally give gratifying results, terminating the disease, occasionally permanently, more frequently for a few months, after which it again becomes active, but will usually yield to a second course of treatment. It is highly improbable that protein therapy is of permanent value in osteoarthritis, as mechanical irritation, rather than bacterial infection, is the important etiologic factor. As thrombo-angiitis obliterans is due to an inflammatory reaction, probably of bacterial origin, it offers a field for protein therapy. If this treatment is begun early in the course of the disease, the results may be most gratifying. Not only is its progress stopped, but the patient may show great improvement in his ability to walk without discomfort; in fact, the pain may entirely disappear. In southeastern Europe, protein therapy has been used quite extensively in the treatment of bacillary dysentery and is reported to be much more efficient than the dysentery serum. Miller has used immunized chicken serum, normal chicken serum, and immunized sheep serum in the treatment of pneumonia. These serums frequently, but not always, gave a chill. It was noted that when the patient failed to react by a rise in temperature there was no change in the course of the disease. Occasionally, after a violent reaction, the disease would terminate by crisis. The immunized chicken serum, after the fibrin was removed, would no longer cause a marked change in temperature and failed to modify the course of the disease. He thought it might be of interest to determine whether a single small dose of typhoid vaccine intravenously, sufficient to give a moderate reaction, would modify the course of pneumonia. Fifteen patients with lobar pneumonia were so treated within forty-eight hours of the onset of the disease. Three of these, or 20 per cent, had an immediate and lasting crisis with disappearance of any symptoms. The lung, however, failed to undergo resolution until the regular time for the crisis. The greatest interest in protein therapy is now centered in its use in the treatment of dementia paralytica. The number of recoveries reported

from malarial treatment varies from 30 to 40 per cent; that is, patients who are able to return to their previous occupations. Multiple sclerosis is another disease in which protein therapy is being used extensively. This new field for nonspecific therapy deserves continued trial. If the treatment is begun early, before irreparable tissue changes have taken place, complete recovery may be possible. It is too early to predict the permanence of the improvement. It is possible that other chronic neurologic diseases may be amenable to this form of treatment. Miller also discusses the present status of specific chemotherapy.

## IMMORTALIZING MACFADDEN!

### *Suggestions for a Geographic Hall of Fame*

A clipping from a Sacramento (Calif.) newspaper, sent in to us by a correspondent, carries a picture of a beautiful piece of wild country, the Castle Craggs at Castella, a few miles south of Dunsmuir, Siskiyou County, in northern California. The legend carried below this picture reads in part as follows:

"Bernarr Macfadden, the New York confessional magazine publisher and physical culture enthusiast, will be honored by some Superior Californians when the central peak of the Castle Craggs at Castella, about seven miles south of Dunsmuir, will be named Macfadden Peak. The dedication will be sponsored by the Redding Chamber of Commerce about August 16th. A special Southern Pacific train will bring 200 New Yorkers, including the bushy-haired publisher."

From the standpoint of a go-getting chamber of commerce, doubtless the idea here disclosed is an appealing one. Just why Californians should go completely across the continent to find an individual to immortalize in their well-known scenery is a little difficult to understand. Possibly, however, this is just a start and we may later find the San Francisco Chamber of Commerce considering the question of abandoning the name of "Golden Gate" for "Albert Abrams Bay". Los Angeles business men might very properly recommend changing the name of Santa Monica Mountains to the "I-on-a-co Mountains" in honor of their late-lamented citizen, Gaylord Wilshire. The conception has infinite possibilities. Lookout Mountain at Chattanooga might readily be called "Mount Cardui", while Nahant Bay (off Lynn, Mass.) could be rechristened to immortalize the omnipresent Lydia by changing it to "Pinkham Bay". "Bromo-Seltzer River" immediately occurs to mind as a substitute for the Patapsco River at Baltimore. For other variants, write your own!

## INDICATIONS FOR AND RESULTS OF CONSERVATIVE OPERATIONS OF KIDNEYS

Waltman Walters, Rochester, Minn., (*Journal A. M. A.*, Nov. 1, 1930), reports a sufficient number of successful cases of conservative renal pelvic resection for hydronephrosis and heminephrectomy to emphasize the value of conservative operation in such cases rather than nephrectomy.



# Medical Association of Georgia

Next Annual Session, Atlanta, Ga., May 12, 13, 14, 15, 1931

## OFFICERS

President	G. Y. Moore, Cuthbert	Second Vice-President	S. T. R. Revell, Louisville
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## DELEGATES TO THE A. M. A.

Wm. H. Myers (1931-2)	Savannah	Alternate, C. W. Roberts	Atlanta
Alternate, Wm. A. Mulherin	Augusta	O. H. Weaver (1930-1)	Macon
E. C. Thrash (1931-2)	Atlanta	Alternate, C. K. Sharp	Arlington

## COUNCIL

M. M. Head, Chairman	Zebulon	C. L. Ayers, Clerk	Toccoa
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### Councilors

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2. J. A. Redfearn (1933)	Albany
3. J. C. Patterson (1933)	Cuthbert
4. O. W. Roberts (1933)	Carrollton
5. E. C. Thrash (1931)	Atlanta
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7. M. M. McCord (1931)	Rome
8. H. M. Fullilove (1931)	Athens
9. C. L. Ayers (1932)	Toccoa
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6. K. S. Hunt (1931)	Griffin
7. W. H. Perkinson (1931)	Marietta
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9. J. K. Burns, Jr. (1932)	Gainesville
10. H. D. Allen, Jr. (1932)	Milledgeville
11. K. McCullough (1932)	Waycross
12. J. W. Edmondson (1932)	Dublin

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### Crawford W. Long Memorial Prize

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V. P. Sydenstricker	Augusta
George Bachmann	Atlanta
R. V. Lamar	Augusta

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J. W. Edmondson	Dublin
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Wm. R. Dancy	Savannah
Paul L. Holliday	Athens

### Fraternal Delegates to Other State Meetings

To Visit Alabama:	J. Cox Wall, Eastman; Jas. A. Fountain, Macon.
To Visit Florida:	Gordon Chason, Bainbridge; W. F. Reavis, Waycross.
To Visit North Carolina:	R. L. Miller, Waynesboro; S. A. Boland, Thomson.
To Visit South Carolina:	Stewart R. Roberts, Atlanta; A. G. Fort, Atlanta.
To Visit Tennessee:	M. M. McCord, Rome; Joe P. Bowdoin, Adairsville.



## INTERNAL DRAINAGE

The term "internal drainage" is used to designate the spilling of pus from a diseased bronchus to neighboring bronchi of either lung. William B. Faulkner, Jr., San Francisco (*Journal A. M. A.*, November 1, 1930), finds that internal drainage is a definite entity, and an understanding of it is important in both the diagnosis and treatment of pulmonary suppurations as well as in the prevention of post-operative pulmonary complications. Intrabronchial injections of iodized oil have permitted a study of internal drainage and of the factors on which it depends. Pus within a bronchus may spill to predetermined areas, depending on the posture of the patient, the site of

the primary lung lesion, and the patency of the bronchus. This drainage is especially marked when application of the principles of internal drainage has enabled Faulkner to localize more accurately the site of pulmonary abscesses, to lessen the number of patients requiring operation, to lower the operative risk, and to increase the percentage of cures.

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## THE NURSE AND THE PHYSICIAN\*

G. Y. MOORE, M.D.

*Cuthbert*

*President, Medical Association of Georgia*

Madame President, guests and members of the Georgia State Nurses' Association, I bring you greetings from an older member of the great healing family of our State, the Medical Association of Georgia. As its President and official representative I am glad to be present and to attest to the friendly cordial relationship which is and always has been first expressed and, most typically, between the physician and nurse at the bedside—but also by an arrangement whereby you have become a part of the public information service of the official organ of the Medical Association of Georgia through the pages of the Journal of the Association in which we voice your policies and purposes as though they were our own. This implies the confidence our Association has in yours. For a number of years your official representative has been invited to meet our House of Delegates to lay before it for endorsement or edification such matters as seem fit to your body. This exchange of interest and information must bring us closer and in greater understanding of our mutual service and of our mutual aims in the care of the sick.

Georgia is a rural state, and its problems in the care of the sick are complicated because of political divisions, highway problems, race relations, economic stress, professional personnel or rather lack of it.

By a strange coincidence, perhaps, you have chosen your president from the rural community and the physicians have chosen their president from the same community. It gives me pleasure to have the opportunity to attest to the devotion in all kinds of

trying circumstances, in the country districts of the private duty nurse with whom I have had most of my experience. Your President and I have had long and most pleasant relationships. To her and to those of your number like her I wish to pay tribute.

Much of my active practice has been spent in the rural districts where there was neither hospital nor nurse to assist.

I have had a long apprenticeship in practical nursing myself and perhaps some conclusions I have come to would be far different. With some of these conclusions you will be in accord, with others you may differ. If so, ascribe to them sincere good fellowship and the best of motives, at least.

The nurse has been the greatest single aid to the physician in his services to mankind.

In the words of Dr. J. Chalmers Da Costa, the famous surgeon of Philadelphia, in a notable address before the ex-resident physicians of the Philadelphia General Hospital, while speaking of the inmates of that great institution and dumping ground for suffering humanity, adds this striking statement, "Here are some who seek health, and some who wish for death. Here comes the physician to heal and to teach, and the student to observe and to learn. Here comes charity to relieve, and religion to console and the foul blight of municipal politics to annoy, to hamper and to curse; and here among some of the worst men living and the most unfortunate, comes woman, white capped and cheerful to comfort and to bless". So comes the trained nurse ever in hospital and home, blotting out the pictures of the dark past. So came and went in the very halls of the great hospital referred to one of your own great leaders, your late National President, Miss S. Lillian Clayton. Loved and honored and acclaimed as having done most in a practical way to symbolize nursing, she was awarded posthumously the first Saunderson's Medal.

\*Address before the twenty-fourth annual session of the Georgia State Nurses' Association, Atlanta, October 27, 1930.



Medicine has been subject to great changes in practice and preparation. As its sister profession nursing is also passing through a period of rapid growth and transformation which is inevitable.

Unlike it, however, it finds its problem more complicated because of such wide divergence in schools, curricula, length of training and most of all in the opinions of what a nurse should be taught.

W. A. Newman Dorland of Chicago, one of the distinguished surgeons of the country, quotes as to the definition of the functions of a nurse as follows: "To care for the bodily needs of the patient; to carry out the physician's orders; to keep a careful record of the happenings of the sickroom as regards the vital phenomena of the patient. Everything that the nurse needs to do and know may be grouped under one or another of these functions, and any teaching that contemplates anything beyond this would merely burden the nurse with useless theory or inspire her with the erroneous and fatal idea that she is endowed with the knowledge and skill of the medical attendant". He goes on himself to add "If this is all that will be expected or required of her is it necessary for any woman endowed with the average gifts of brain and common sense to spend three or four years acquiring a nurse's diploma"? If I may interpret the last sentence of the definition I greatly differ with his conclusion. Dealing with the "sickroom as regards the vital phenomena of the patient" (in the vernacular) takes in a lot of territory.

I take it, it is what Florence Nightingale meant when she said a nurse comes to do away with all the discomforts, all the irritations, apart from the particular malady from which the patient may be suffering. To do this she meets a broad educational foundation in physics and chemistry, and physiology, and hygiene, in literature and history, in sociology and psychology. This does not in any sense minimize the greater need of innate refinement, common sense, the keenest perception and good judgment, those qualities indispensable to the making of wise decisions, the development of self control, and the establishment of confidence.

The nurse of the older group excelled in these qualifications, perhaps because she was more individually chosen, and trained individually at the bedside as cannot so well be done in the modern school except at relatively prohibitive cost in supervisory personnel.

There is where it seems to me lies the advantage of the school in the small hospital. Is there not some plan or could not one be devised where this great advantage might be kept at little or no sacrifice to the best interests of preparations? Some form of centralized courses of instruction with extension courses in the small hospital could carry out this idea.

Let us all work for it in Georgia!

You are passing through a great crisis in your professional advancement.

The work of the national grading committee has pointed out deficiencies in your preparation and schools, bad organization in the distribution of your services, economic stress in the rank and file of your personnel. For all these the remedy is education, education of the young woman who desires to become a nurse in the high school in requiring home nursing courses which will disclose aptitudes and lead to vocational guidance, education of the community to take the responsibility of organizing and sponsoring community registries, and distribution of the cost of sickness, risks to the whole community instead of to those alone who are ill and who wait to serve them.

The Medical Association of Georgia stands ready to support you in the future as it has in the past, to endorse such measures as lead to better and more nursing care to more of our people, and to assist you in establishing a higher ethical performance of your duties, and more satisfying personal rewards in their doing.

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#### ROLE OF CLINICAL PATHOLOGIST

Arthur H. Sanford, Rochester, Minn. (*Jour. A. M. A.*, Nov. 15, 1930), traces the history of this section, the growth of clinical pathology and the status of the clinical pathologist. The clinical pathologist, he says, is a physician who devotes all or the major portion of his time to diagnosis of disease by laboratory methods. He is a histopathologist and microscopist. He must be a serologist, a bacteriologist and to some extent a parasitologist.

## CHRONIC LIPOID NEPHROSIS\*

*Clinical Considerations With  
Report of Case*L. MINOR BLACKFORD, M.D.  
Atlanta

"Nephrosis" has been the subject of many papers and of many arguments in the past few years. The condition is characterized by "insidious onset, marked edema, decreased basal metabolism [in 60 per cent of cases], oliguria, marked albuminuria, decreased blood proteins with relative increase in globulin, reversing the usual albumin-globulin ratio, lipoidemia (hypercholesterinemia), good phenolsulphonphthalein excretion, no increase in non-protein nitrogen of the blood, cylindruria, but no hematuria, doubly refractile lipoid bodies in the urine, normal blood pressure" and normal eye-grounds. Anemia is rare and salt is retained.

Last year Christian<sup>1</sup> could assemble but eighteen cases of "nephrosis" in adults which came to necropsy. No conclusions could be drawn from the widely differing pathologic conditions in the kidneys. In fifteen of these eighteen cases, death was apparently due to infection, and in eight of these the pneumococcus was the offending organism.

It has been established that deficit of serum proteins may be the chief factor in the production of certain types of edema. Leiter<sup>2</sup> bled dogs repeatedly and re-injected their washed blood cells suspended in Locke's solution. When the serum protein content of the blood became low (less than 3 per cent), massive edema developed. He has not yet published all the details of his research. Barker and Kirk,<sup>3</sup> who unfortunately were in ignorance of Leiter's work, with a similar technic produced a condition closely resembling "nephrosis". Microscopic study of sections from the kidneys "revealed rather marked fatty infiltration or degeneration of the tubules, and most of the glomeruli and capsules, too, showed fatty infiltration." Although the artificial removal of serum proteins in these experiments in Christian's own laboratory resulted in albuminuria, edema,

and demonstrable pathologic changes in the kidneys, Christian<sup>1</sup> apparently continues to consider "nephrosis" essentially a renal disease. He has expressed the opinion that the deficit of serum proteins is caused by leakage of albumin through the kidneys. He has hypothesized "a functional change in the capillary tuft". The varying pathologic picture of the human kidney in "nephrosis", it seems to me, can better be explained, in the light of the experiments cited, by assuming that the physiologic disturbance is not in the kidneys.

The work of Leiter and of Barker and Kirk lends support to a broad, modern theory, which has recently been concisely formulated by Daniel,<sup>4</sup> namely, that "Bright's disease is not a primary disease of the kidneys, but is a result of a general metabolic breakdown of the entire body structure."

According to Barker and Kirk, "The observations made of metabolism, in the patients and dogs, suggest that the lowered basal metabolic rate may be only a protective measure . . . as seen in inanition and starvation."

When the pathogenesis and pathology are better understood, a better name may be found for this syndrome, but in the meantime, if one admits his ignorance as to these fundamentals and uses the term in a purely clinical sense, I believe one may continue to use the term "nephrosis".

*Report of Case*

*History.*—Mr. A., aged 41, was brought to the Davis-Fischer Sanatorium on Nov. 15, 1928, by Dr. James S. Tankersley, on account of extreme amounts of albumin in his urine. The patient's only complaints at that time were of pleuritic pains. His father had met with an accidental death and two sisters were dead from unknown causes. His mother, ten brothers, four sisters, his wife and two children were living and apparently well (one brother has since died of portal cirrhosis, the diagnosis of which was confirmed at necropsy). The patient had never used alcohol or tobacco. He was seriously ill with diphtheria at 10, and suffered a moderate attack of influenza during the epidemic of 1919. He said that he had had no other illnesses except frequent attacks of sorethroat and rheumatoid pains over a number of years.

*Present Illness.*—In September, 1928, Mr. A. had begun to feel bad all over, with pains in his chest, which were made worse by deep breathing. There was insidious development of shortness of breath and

\*Read before the Medical Association of Georgia, Augusta, Ga., May 16, 1930.

swelling, and he voided little. His usual weight was about 168 pounds. Two weeks before admission, Dr. Tankersley had seen him, at which time he weighed 184 pounds. Dr. Tankersley got rid of this edema, but such large amounts of albumin persisted in the urine that he wished his patient to have the benefit of thorough laboratory studies.

*Physical Examination.*—The patient was 69 inches tall and weighed 156 pounds stripped. The systolic blood pressure was 122, the diastolic 90; the pulse 92. The temperature was normal, but from time to time afterward there was a little fever. He was comfortable except for the pains in the chest, especially at the right base, on deep breathing. Pyorrhea was marked and several teeth were devitalized. The tonsils were fibrous, cryptic and greatly enlarged. Although the area of aortic dulness was somewhat widened (which was corroborated roentgenologically), the heart seemed normal. Signs of moisture in the right axilla were elicited. The abdomen was soft and the prostate felt normal. Edema was perceptible over the sacrum. The tendon reflexes were all normal. The pupils reacted readily to light and accommodation. The retinal arteries appeared normal and there were no hemorrhages or exudates in the eye-grounds. Edema, extreme albuminuria, normal blood pressure and eye-grounds caused me to make a tentative diagnosis of nephrosis.

*Course.*—The history of frequent attacks of sore-throat and pains presumably of focal origin would have warranted the removal of the tonsils. The condition of the urine was also adequate reason for tonsillectomy. This operation was done November 21. Investigation of his sinuses then and later was negative. Extraction of the bad teeth was also advised, but I did not get this done for several months. Mr. A. returned to his home in the mountains with instructions to limit his intake of fluid and salt, but to eat as much fresh meat as he could get.

In December I was called to see him at his home. His left leg was hot, painful and greatly swollen. The temperature was slightly elevated. Blood urea at this time was even lower than a month earlier. After involvement of the other leg, the phlebitis yielded to generalized edema. In February, 1929, he went to another hospital and in the course of a month got rid of the greater part of the swelling. A few weeks later the edema was as bad as ever, he grew discouraged, ate what he pleased and did not limit his fluid intake. Finally, in desperation, he returned to me July 5, 1929.

*Second Admission.*—On this day Mr. A. weighed 225 pounds stripped. He was waterlogged and, even when propped up in bed, had great difficulty in breathing. His systolic blood pressure was 160, the diastolic 116. The heart sounds were rapid and of the ominous tic-tac quality. I feared that the clinical syndrome nephrosis had given place to that of nephritis, which happens not infrequently. The eye-grounds were still normal, however, and the laboratory reports soon reassured me. I started him on ammo-

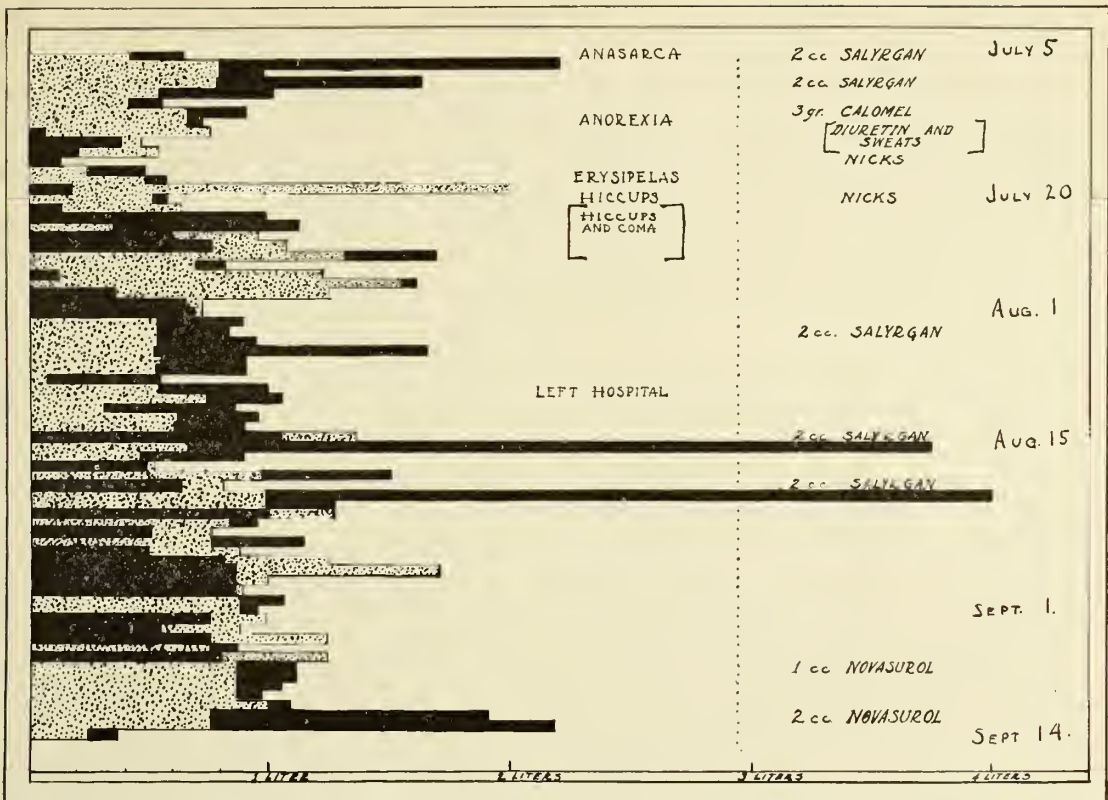
nium salts in enteric-coated capsules and salyrgan intravenously, with a rigid restriction of salt and fluid, and placed him on a high protein diet. Although he lost 15 pounds in a week, the chief result of this treatment was to make him thoroughly miserable. His condition was so unsatisfactory that I called in a consultant. Since the patient was growing worse under the therapeutic methods employed, he suggested certain changes, but they did not help.

As a last resort, on July 16, I nicked each leg in several places below the knee. For a time each nick simulated an active urinary meatus. Fourteen hours later the patient had lost 13 pounds, and was voiding three times as much as before. The second day he lost 7 pounds and voided even more. He felt much better and was able to enjoy his food again. Forty-eight hours after the minor operation he was seized with a chill, and this was followed by fever, general malaise and pain in the left leg. There was a fiery-red area about 10 by 15 cm., centering around one of the nicks, from which cloudy fluid was escaping. The temperature continued to rise and after a few hours I gave him 5,000 units of erysipelas antitoxin intramuscularly. The next morning he seemed better, and the inflammation was almost gone from the left leg, but the right one looked too pink, so I administered a second dose of antitoxin. There was no further evidence of erysipelas.

The following day he began to hiccup; this symptom became very annoying, and I tried to control it with sedatives. About supper-time six days after the skin was punctured, four days after the appearance of the infection, he sank into coma and looked as if he were going to die. His breathing that night ranged from five to nine times to the minute. Caffein-sodio-benzoate may have tided him over a crisis, but on the third day of coma the family requested me to let him die in peace and all medication was withheld. After five days of constant hiccupping and of almost continuous coma, for no apparent reason he began to improve, and in another day or two the hiccups stopped. The greater part of the edema had by that time disappeared and the drainage through the holes in the skin of the legs (there had been drainage even through the antitoxin needle holes) had virtually ceased. He gradually regained some strength and August 9 he went to the home of a relative in the city.

September 14, although he was far from being as strong as I wished to see him and there was still some edema of the legs, Mr. A. decided to go home. His blood pressure that day was 116 systolic and 80 diastolic, and he weighed 155 pounds in his clothes. This was a loss of more than 70 pounds in 72 days. He felt much better when he got home, and Dr. Tankersley felt it the part of discretion to let well enough alone. This plan has been abundantly justified. After a time the patient grew tired of the ammonium nitrate pellets, and discontinued all medication. His strength improved greatly and he jogged along through the winter, weighing usually around





## COURSE DURING CRITICAL STAGE OF A CASE OF LIPOID NEPHROSIS URINARY OUTPUT IN BLACK

### LEGEND

The amount of fluid intake is stippled; the amount of urine voided is black. The less amount for each day is super-imposed over the larger amount to emphasize the difference. The accuracy for each day is not guaranteed, particularly during the period of coma, but it is believed that on the whole the chart gives a fairly accurate idea of the fluid intake and of the urinary output.

180 pounds in his clothes. He has not been able to do much work on account of shortness of breath, but he has been able to walk several miles, resting along the way, and he has shot a few squirrels. He was annoyed for a time by itching of the skin, complicated by a friableness of the nails, which made it impossible for him to scratch.

I went up to spend Sunday, May 11, with him. He looked the picture of health. His arms, instead of being dry skin and bones, were well muscled and covered with a moderate layer of fat. His blood pressure was 114 systolic and 76 diastolic, and the heart seemed essentially normal. He said that two weeks earlier he had been down to his usual weight, and had felt fine, but that he had caught cold and that ten pounds of swelling had come back on him. The extra weight seemed to be all below his knees.

### Comment

There is some evidence that this man's whole trouble developed from focal infections, and that, whatever part of his system was most injured, the injury was too profound for ready restitution after the removal of foci; it is also possible that not all foci were removed. In my opinion, the phlebitis

in December, 1928, was probably metastatic from his bad teeth. I believe also that the infection which developed in the left leg six months later was due to streptococci left from the phlebitis rather than from without. Indeed he had been running a slight fever before the skin was punctured. At the same time, although a skin taut with edema, like the estate of matrimony, is not to be entered into lightly, I believe that in this case the drainage through the skin saved his life. The immediate response to the release of pressure through these nicks was spectacular. The circulation was evidently greatly embarrassed by the seventy-odd pounds of excess water that was packed away in his tissues.

That he survived five days of coma seemed a miracle to everyone who saw him. The wise selection of parents, the good, temperate life he had led, and the devoted nursing care he received at the Davis-Fischer are

the only explanations of the miracle that I can offer. In view of the difficulties in securing fresh meat in the mountains, I think his course since he went home last September has been remarkably good. The role of infection is suggested again in the mild recurrence of edema following his recent cold. The circulation of the legs must be impaired as a result of the bilateral phlebitis; this would explain in part the persistence of the edema.

The widening of the aorta suggested syphilis. The patient stoutly denied this disease, and I am sure that he did so in good faith. The Wassermann reaction was negative twice, his wife has had no miscarriages, and their children are robust. At the same time a few cases of nephrosis have recovered under antisyphilitic treatment; if he lived in Atlanta I would with great caution give him a course of neoarsphenamine. It is hard to estimate the functional efficiency of this man's heart. It never missed a beat during five days of coma last summer, and yet his dyspnea these last eight months cannot be explained by the amount of edema he has exhibited.

#### *Treatment of Nephrosis*

It is important to know that even in the presence of typical Bright's disease the body must not be starved of protein. In rare cases of profuse albuminuria, if the blood pressure is normal, and the return of phenol-sulphonphthalein administered intravenously is good, it is essential to give the patient as much protein as you can reasonably get into him. The intake of fluid must be rigidly restricted, and every possible effort made to cut down on salt. An absolutely salt-free diet is utterly impracticable. An unusually low salt diet will grow tiresome to the patient. To combat this I have found the use of sodium mallate, prepared by Sharp and Dohme and sold as EKA salt, satisfactory. EKA salt is decomposed by cooking, but, when added to food already cooked, it is indistinguishable from ordinary table salt.

There is still some argument as to medication. Many authors, notably Epstein,<sup>5</sup> have insisted that thyroid extract was most important. It is certain that patients with nephrosis can tolerate enormous doses of thy-

roid extract without evidence of hyperthyroidism. The explanation of this is not simple. If the decrease in basal metabolism is a "protective mechanism as seen in inanition and starvation," it would not seem logical to break down this protective mechanism. Personally, I believe that the explanation of the extraordinary tolerance of thyroid extract is that the functional activity of the thyroid gland, which has already lessened as a defensive measure, continues in the same way to grow less in proportion to the thyroxin supplied from without. When the low basal metabolic rate in a severe case is brought up to normal by the administration of thyroid extract, it may well be that the patient's thyroid gland is entirely quiescent.

If syphilis is demonstrated, specific treatment is of course indicated.

I used digitalis from time to time in this case, but only because I was afraid not to use it. I do not think it helped.

Keith and his co-workers at the Mayo Clinic<sup>6</sup> place principal reliance upon ammonium nitrate and salyrgan. The dosage of ammonium nitrate is from 3 to 10 grams (45 to 150 grains) a day, and it must be given in an enteric coating to avoid gastric disturbance. Weber and Judd, of Rochester, Minn., prepare a neat enteric-coated pellet containing one-half gram. In large quantities they are relatively inexpensive, about a cent apiece, which is much cheaper than a less appetizing preparation would be at a local drug store. If the phenolsulphonphthalein output is good, ammonium nitrate may be continued indefinitely. This drug increases and prolongs the effect of salyrgan and in some cases is enough to control the edema by itself.

Salyrgan is a complicated organic preparation of mercury. An occasional patient will not tolerate it, and it is therefore advisable to make the initial dose not larger than 0.5 cc. If there are no undesirable effects from this, the next day 2 cc. may be administered and this dose may be repeated every three or four days. If symptoms of mercury poisoning develop, it must be discontinued. I have seen as many as eleven quarts voided by an edematous patient in twenty-four hours after 2 cc. of salyrgan. The drug is



best administered intravenously, but I have several times given it intramuscularly, with no bad effects but a little soreness for a few days.

As was illustrated in this case, the ammonium nitrate-salyrgan treatment should be instituted before the patient gets too full of edema, for then it may be necessary to resort to the extreme measure of drainage through the skin. Salyrgan and ammonium nitrate are often of great value also in the treatment of dropsical cardiac patients.

Since there are reasons for believing that focal infection is a causative factor in this disease, the removal of foci is of the utmost importance.

### Summary

Nephrosis is a disease characterized by retention of water and salt, but not of nitrogenous compounds, by profuse albumin and casts, but no blood, in the urine, and by normal blood pressure until the edema acts mechanically to embarrass circulation. The etiology of the disease, its pathogenesis, and even its pathology are still obscure. Nephrosis is probably not primarily a disease of the kidneys. The proper treatment is limitation of fluid and salt, with unusually large amounts of fresh meat to replace the albumin which is constantly being lost with the urine. Ammonium nitrate and salyrgan are valuable when drugs are required.

Although patients with this disease tolerate large amounts of thyroid extract, recent experimental work indicates that this is because the decreased activity of the thyroid gland is a protective measure. If this theory is correct, the use of thyroid extract does not rest upon a logical basis. The high protein diet, which is universally advocated, may act, not alone through replacement of the albumin lost in the urine, but also through its own specific dynamic action.

A case of chronic lipid nephrosis, which has been under observation for eighteen months, is reported.

NOTE:—Dr. Tankersley wrote, Nov. 11, 1930, that Mr. A. was much stronger, and free from edema most of the time.

*Laboratory Data.*—The urine was examined repeatedly from November, 1928, to November, 1929. The specific gravity varied from 1.001 to 1.022, but was usually about 1.020. The urine was always

acid, and never contained any sugar. Large amounts of albumin were invariably present: on the heat and acetic test, the contents of the tube frequently solidified; on one occasion formaldehyde was added and the specimen kept in an ice-box over night and it then resembled clabber. Many casts of all types, chiefly coarsely granular, were constant, and fat was demonstrated in them with Sudan-III. A specimen was sent to the Mayo Clinic to be examined for doubly refringent lipid bodies, which were not found. Pus was found in some specimens, but no red blood cells.

In November, 1928, the basal metabolic rate was — 2 and + 3. This was early in the disease at a time when edema was hardly perceptible. The chances are that it was subsequently lowered.

Hemoglobin was 70 per cent (Dare) in November, 1928, and 79 per cent July 6, 1929. These readings are normal for this type of instrument. The numbers of red cells on the same dates were 4,360,000 and 3,870,000, respectively, a moderate decrease. The number of leukocytes and the differential count were normal on several occasions.

In November, 1928, the phenolsulphonphthalein test was reported 70 per cent. In July, 1929, it was reported only 20 per cent, but the dye was inadvertently given subcutaneously and was evidently not absorbed on account of the anasarca.

Blood urea per hundred cubic centimeters of blood was as follows:

Nov. 11, 1928 .....	25 mg.
Dec. 20, 1928 .....	20 mg.
July 6, 1929 .....	38 mg.
July 24, 1929 .....	46 mg.

The blood urea determinations the first two times were low normals; the last one was slightly increased. July 24, 1929, creatinine was 1.4 mg.

Dr. Carl H. Greene, of the Mayo Clinic, reported the value of cholesterol as 359 on a specimen of blood taken July 17, 1929; this was about twice the normal. The ratio of serum albumin to serum globulin was 36.4:63.6, instead of the normal 2:1. The total amount of serum protein in this specimen was so low that Dr. Greene doubted the reliability of the result. These specimens were sent by air mail, but it is possible that some change occurred in transit. The serum proteins should have been checked immediately, but I neglected to send another specimen for several weeks. The result the second time was not unusually low for this disease, but the patient had undergone remarkable clinical improvement in the meantime.

Most of the other laboratory work was done by Dr. E. B. Saye, of the Davis-Fischer Sanatorium.

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## THE SOCIOLOGICAL PHASE OF THE MEDICAL PROFESSION\*

W. FRANK WELLS, M. D.  
*Atlanta*

A doctor is a man who has had special training in medicine, whose work is that of ministering to the physical ills and building up the general health condition of man. The fact that he has had this special training and therefore has received the degree of Doctor of Medicine, does not in any sense relieve him from any of the relations and obligations common to civilized man everywhere, except such minor matters as jury duty, etc. He is still a man and is still subject to the various relations and duties of life—political, social, moral and religious.

As a citizen of a political commonwealth, the doctor is under as much obligation to execute his political rights and privileges as any other man of any profession, not even excepting politicians. He is to remember that the basic principles of democracy, which are the foundation and ground work of our national life, were woven into the constitution by men of every walk of life who valued the political rights given them and who voiced their opinions through their votes.

Also, he is especially to remember that it is only through such fulfillment of his political obligations and duties in this present age that these principles of democracy will be preserved and kept intact in the fiber of our national life. The doctor, by virtue of his wide acquaintance brought about by the very nature of his profession, together with his above-the-average influence which naturally follows, occupies a pivotal position in this relation and thereby makes his political obligations and duties inescapable.

It is the duty of every doctor to go to the polls and vote in every election; whether it be national, state, county, city; so that we may raise the standard of our politics.

Furthermore, being a doctor and a professional man, and therefore a public man in the better sense, he is an example to the people with whom he comes in contact as regards language, culture, morals, neatness, cultiva-

tion of his physical being, the pursuit of health and the putting of himself in line to aid uplifting movements of his race. Because a man is a doctor gives him no right to neglect his civic duties, his church and what we mean by culture in general. It is a very sad thing to see a magnificent mind well trained in medicine, neglect all other wise and beautiful things in life.

Many doctors go through life and never read anything but a Medical Journal or the daily paper. To think of the great minds of the ages and for one to be utterly ignorant of their writings is a mental pathos beyond expression. A philosophy of life that includes only duty, a philosophy of life that includes only pleasure, a philosophy of life that includes only accumulation, is each, in its time, fatal to the highest development of the individual doctor.

Educationally speaking, the scientific man is under obligation to society to make some contribution to the economic world and to the well-being of human life. In the industrial and economic world, science has done much to bring in a new era of life. With the introduction of machine power to do the manual labor of the world, which began in the sixteenth century, the arduous tasks of mankind become less a labor of drudgery. Since then living conditions have become more tolerable, the laboring man has been able to do the labor with less output of actual energy. One man and a machine now do the work in a few hours that required many men many days to do, only a few years ago. With the coming of the machine many comforts of life have been added to the human lot. Men now ride in automobiles instead of horsedrawn vehicles; they use electric light in homes instead of tallow candles and kerosene lamps; telephones have taken the place of written messages or communication by word of mouth; and altogether, the conditions of the age in which we live are now infinitely superior to those of any age which has come before us.

But along with this industrial development, has come an industrial revolution. This is brought about by the change in economic conditions. If the machine has lessened the labor of mankind, it has also limited the chance for labor, and if one machine has

\*Read before the Fulton County Medical Society, Atlanta, Ga., October 2, 1930.

taken the place of fifty men, it means also that fifty men are probably now without a job and without an opportunity of making a livelihood. So with the very valuable contribution that science has made to society in this respect has come a very urgent responsibility. That responsibility is now to provide through the machine age some sort of a broadened opportunity whereby the man who once worked with his hands may now find a means of making a living in some other way. This is the obligation of the scientific man to the economic world.

Likewise when we come to think in terms of the medical profession, we are immediately able to see that this field of science has made a most valuable contribution to the human race. Length of human life has been increased; the death rate of children has been lowered; death at birth has been reduced; sanitation has become the order of the day, and preventive treatment has taken the place of curative attention; and the effort is now made to keep men well rather than to cure them after they are sick.

All this and more has been done for human society by medical science, but it does not mean that the responsibility has not been increased. Seneca, the old Roman Senator, uttered a philosophy which will never die when he said, "Those who have gone before us have accomplished much; they have finished nothing." It can truly be said that medical science is only beginning to see the sunrise of its educational responsibility. There will probably never come a time when men will not be sick and will not need the aid of a physician, but that does not mean that much can not be done to prevent conditions that bring about poor health. Medical science needs to follow up its pioneer work in bringing into the educational system of the country, courses of study, practices of health habits, suggestions for clean, physical living that will in time produce a generation of men and women who at least know the fundamental principles of living that will preserve their health.

Educational leaders in this day are open to suggestions for books on health and for more systematized courses of study through the grades and up through the high school age to have a regular place in the curricula of the schools. Medical science, more than any other

agency, can hope to have this done. It will have to do with the safety of human life; it will have to do with the cleanliness of human life; and it will have to do with the sanity of human life. Further than this, the time is appropriate for some suggestion along a definite plan for taking care of the mentally unfit who now have a place in our regular student body. To use the words "infest our student body" would seem to be almost unkind, and yet we are willing to venture the statement that if every class room in the State of Georgia could be freed of that child who is mentally deficient, not able to carry on the work of his or her grade, and is therefore proving a handicap to the entire student body, it would bring about the most helpful condition that could be imagined.

This, of course, means that plans to take care of these unfortunate children would have to be provided. It takes more than a school room to handle a child who is not mentally fit to do a normal amount of work. It will take a home; it will take a teacher equipment altogether different from the average public school teacher; it will take one who can teach the feeble mind the simple things of life; it will take one who can serve as trained nurse upon occasion; it will take one who would be willing to be all: teacher, nurse and mother, to offer to this class the things that they need. It may seem like a very visionary thing but with medical science to hold this high ideal before the eyes of the educational and legislative leaders of the State, it would bring about an educational condition that would be of infinite value to the school systems of the State.

And the professional man must likewise recognize his obligations to religion. Most of the professions are the outgrowth of the beneficent spirit of Christianity. Ministering to the physical needs of humanity, Christ set up the beautiful charities that today express themselves in hospitals, orphanages, asylums, schools, libraries, playgrounds and countless other agencies set up for the betterment of humanity.

The churches temper society and make possible the progress of science in well nigh every field. The integrity of truth is cherished on the altar of every true church and thus the church joins hands with the doctor in seek-

ing to overcome evil with good by teaching the value of the body as the temple of the Holy Spirit. Superstition and prejudice give way wherever the true spirit of religion has gone, paving the way for the doctor and the teacher and the statesman to set up the citadels of civilization. Thus we see that every doctor is but tracking the steps of Jesus when he undertakes to serve humanity. We can not ignore God. The history of the world is the story of Jesus and His conquering spirit of compassionate love for the broken and bruised bodies and minds and hearts of the race.

Bushnell said: "It were easier to untwist all the beams of light in the sky and to separate and expunge one of the primary colors, than to get the character of Jesus, which is the true Gospel, out of the world." Renan declared: "All history is incomprehensible without Christ. He created the object and fixed the starting point of humanity." Disraeli, the great Jewish statesman of England, said: "Jesus has conquered Europe and changed its name to Christendom."

All countries that have refused the cross of Christ have withered; and civilization has ever found its sweetest music in the songs of Zion and its only lasting solace in the parables of Galilee. History without a proper recognition of Christ is like astronomy with the stars left out, like geology with the rocks thrown away, like botany with the flowers forgotten. Neither Gibbon nor Green nor Hume nor Macaulay could write one chapter of history with Christ left out. All history before Bethlehem converges toward Him; all history since Calvary diverges from Him. Christ everywhere fills the universe with Himself.

Art centers about Christ and the religion He gave the world. All the great paintings have Him for their subject. Every musical composition is keyed to the love of Christ. Every abiding line in literature points toward God. If civilization is to be saved, leaders everywhere must turn to Christ. It is either Christ or chaos!

Thus doctors, lawyers, explorers, merchants, financiers, farmers—all must accept the basic doctrine that the spirit of man is the important thing—that man does not live by bread alone but by every word that proceedeth out of the mouth of God. "Keep thy heart

with all diligence, for out of the heart are the issues of life."

If business is to be good, we first must have good men. Mr. Babson has recently said that every financial depression may be ultimately traced to the wilful disobedience of the people. When we obey God's laws, we have God's blessings.

Nations rise and fall in direct ratio to their allegiance to God. The history of the world is the record of nations that have risen or fallen in relation to their trust in God.

"All nations have their message from on high  
Each the Messiah of some central thought  
For the fulfillment and delight of man."

It is a sad spectacle to review the history of the nations and see how the pallbearers have borne away the broken and defeated remains of nations once vigorous and strong, but brought low because of vice and sin. Just so, the pallbearers stand at the doorway of our civilization today—civilization made possible by our forefathers who came to this new land in order that religion unfettered might be the guiding star of our destinies—the pallbearers stand today awaiting our verdict: namely, whether we will be true to the ideals of our forbears or sink into unbelief and misery because we refuse to put our trust in God.

Many doctors never go to church for ten or twenty years. Many doctors never cultivate the spiritual and therefore after awhile it atrophies and dies. It is rather an unfortunate thing for man to neglect God altogether. I appeal to every doctor in this Society and to every thoughtful citizen everywhere to lend himself to the chief task of this generation: namely, "to seek first the kingdom of God and His righteousness," knowing full well that "all these things shall be added unto you."

Then, one way of getting at life is to think—"Suppose everybody avoided moral issues as I do; suppose everybody neglected good reading as I do; suppose everybody ignored progress as I do; suppose everybody disregarded the church as I do; what kind of a world would this be? For example, it is just as evil to neglect financial relations as it is to make financial relations the chief end. The whole aim and object of life is to make a well



rounded life, a well balanced living force which includes the professional, the physical, the mental and the moral. The highly developed, balanced, and proportionate man is the idea of medicine and of life. TO BE is sometimes more important than TO DO or TO HAVE.—Fulton County Medical Bulletin, October 16, 1930.

### THE IMPORTANCE OF PROMPT TREATMENT OF EYE INJURIES\*

W. H. CABANISS, M. D.  
*Athens*

After accepting Dr. Gerdine's invitation to appear on the program today, I was somewhat perplexed as to a desirable subject for discussion. But few of you would be interested in a paper on Glaucoma, even if it were so complete as to present our present knowledge on the subject, and I might cite case after case of complicated mastoiditis without adding anything of practical value to your store of knowledge.

After much thought, I have decided to discuss, in a general way, some of the common injuries of the eye. There is scarcely one of you but has patients coming from time to time for treatment of an injured eye. These cases may range from the very simple ones with a foreign body under the lid to those more serious such as a shot in the eye or a laceration of the cornea. My discussion can hardly be dignified into being called "a paper", as I shall refer you to no extensive bibliography and cite no authorities in substantiation of the statements I shall make. Neither shall I give you in detail the various divisions of the eye with a long list of the possible injuries that may occur.

Instead, I will try to tell you something of the type of injuries such as many of you have referred to me and I hope to interest most of you and, perhaps, give to some of you something of value.

It is a common experience with every eye man to see cases two, three or perhaps ten days after the accident has occurred. Frequently, this delay means the loss of an eye

or serious impairment of vision and I would, therefore, urge upon you the necessity for prompt action in such cases in which you are in doubt.

In laceration of the lids, the problem is not only that of getting union of the torn or cut parts, but it is to be remembered that unless the function of the lid is properly preserved there may be a resulting ectropion or intro-pion. Any very large scar just below the lid will most likely pull the lid from the eye, giving ectropion and a constant epiphora.

One of the common injuries to the conjunctiva is due to getting acid from an automobile battery into the eye. Usually the victim will have washed the eye sufficiently to dilute the acid by the time he gets to you and the burn is rarely deep enough to give much trouble. A more serious condition is that of getting whitewash into the eye. In spite of every effort to wash it out, you will usually find particles of lime under the lids and in the fornices. Lime produces a deep painful burn and there is much danger of getting adhesions between the lids and the globe. In accidents of this kind, one should be very careful to remove every vestige of lime.

If the injury is confined to the conjunctiva, use cold applications to reduce the swelling of the lids, irrigate the eyes with boric acid solution and instill boric acid ointment or something similar to keep the lids lubricated. And have the patient pull the lids apart often enough to break the adhesions apart.

Probably the injury seen most often is that of a foreign body in the cornea. This may be a sliver of wood or bark or a cinder, but more frequently is a piece of metal or a particle from an emery stone. In such cases, I would advise you to cocaine the eye thoroughly before removal is attempted. Then use a sharp instrument with the eye well illuminated. Unless you can see what you are doing, you may easily cause additional trauma. With a match or toothpick, it is impossible to remove any but a very superficial object and there is almost always an unnecessary amount of corneal epithelium rubbed off.

The instillation of boric acid ointment and bandaging the eye after removal of the for-

\*Read before the Eighth District Medical Society, Washington, Ga., August 13, 1930.

foreign body lessens the subsequent pain and allows the epithelium to heal more quickly. In such cases, I always tell the patient to return promptly if there is pain in the eye or continued sensitiveness to light after another day. It is not uncommon for an ulcer to follow and prompt treatment reduces the probability of trouble.

An ulcer will frequently follow if the foreign body is not removed within twenty-four hours, as this is nature's way of removing a foreign body from the cornea. If the particle is metallic, a rust stain occurs and this should be removed.

Corneal burns by acids or lime are not uncommon and may be severe, particularly if caused by lime. The treatment of these should be done by one familiar with the eye.

Perforation of any part of the eye is always serious and perforations of the cornea are particularly so, as the iris or lens or both may be involved. Corneal perforation, traumatic, may be caused in various ways. Penetration by a flying piece of metal or glass is common and it is easy to overlook a very small perforation where there has not been even a loss of aqueous. Some weeks ago I was consulted by an electrician who told me that he had been struck in the eye by a very small staple, such as is used in putting up fine wire. On inspection, I could see a small abrasion in the upper part of the cornea. There was no loss of aqueous and the wound appeared to be but superficial. His iris showed spots of dark pigment, as is not uncommon, and I told him that I thought he would have but little trouble. An examination the next day showed that the point of the staple had gone through the cornea, penetrated the iris and barely touched the lens. The iris wound was right through one of the pigmented spots and the corneal wound was so fine as to be overlooked with the unaided eye.

The end result was that his eye is practically useless because of a deposit of pigment on the capsule of the lens. If this had not been noted at the time, it would have been hard to definitely fix it upon his accident and he would not have gotten the compensation to which he was entitled.

If the perforation is near the margin of the cornea, there is apt to be a hernia of the

iris if the wound is sufficiently large. Any protrusion of the iris should be cut off at once and the edges replaced. If this is not done, the iris will be incarcerated in the wound and this will result in an easily irritable eye.

It is very important to make certain that the perforating object is not in the globe, as failure to do so may not only cause the loss of the injured eye, but the other, also, through sympathetic inflammation. Prompt recognition of a metallic particle will often permit of its removal with a magnet, whereas each day of delay decreases the hope for successful removal.

I have more than once seen a case in which a small bit of prolapsed iris had been taken to be the foreign body and repeated efforts made to get it out. This was very painful and bad for the eye. The same mistake has been made when the wound was in the sclera and a portion of the choroid showed through the lips of the wound.

I have under observation two cases in which there is a bird shot in the vitreous. The vision is about 50 per cent of normal, but I have repeatedly advised removal of the eye as there is always danger of a flare-up in which both eyes may be lost. One of these cases has stood unchanged for twelve years, but there is the ever-present danger.

As a general rule, atropine solution, hot applications, and dark glasses are indicated in wounds of the cornea.

Many perforating wounds of the cornea show injury to the lens, causing a traumatic cataract. The treatment of a traumatic cataract depends upon the condition of the lens which sometimes swells so much as to require its extraction to prevent a secondary glaucoma. Usually, the lens will be absorbed in time, but occasionally a needling is done to hasten the process.

A severe concussion of the eye may rupture the capsule, causing a traumatic cataract or the lens may be dislocated partially or completely. I have seen cataract follow a blow from a fist, a baseball, a non-perforating shot from an air rifle, and repeatedly from being hit by a thrown stone.

Instead of a cataract, a concussion may cause severe intraocular hemorrhage into the vitreous. This is serious and frequently

means a lost eye. Rupture of retina or choroid may occur but this cannot be seen with the unaided eye.

Accidents may cause these or many variations of injury to the eye and the general practitioner is usually the first to be consulted. Upon your skill and judgment will depend the welfare of many an eye. Waiting a few days for the proper treatment may mean the difference between success and failure in getting the desired result.

In conclusion, I would like to re-emphasize:

1. Do not attempt the removal of a foreign body from the cornea until the eye has been cocaineized and use a sharp instrument.
2. Any perforation of the eye is serious and deserves the attention of one familiar with the eye. Any hernia of the iris must be excised promptly to get the best result.
3. In perforating wounds caused by chips of metal or small objects, an x-ray should always be made to determine the presence or absence of a foreign body in the globe. Failure to recognize such a condition has resulted in total blindness and it might conceivably happen to your case.

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#### STAFF MEETING

*Phoebe Putney Memorial Hospital, Albany*

J. A. REDFEARN, M.D.  
*Albany*

Minutes of meeting read on November 11, 1930.

Due to absence of N. E. Benson, Chairman, N. R. Thomas presided.

A discussion of charts was then taken up. First, Dr. I. M. Lucas discussed a case of detached placenta previa which he rushed at 4 a.m. to the hospital, completing delivery in a few minutes, to no avail, for the patient died ten minutes later due to hemorrhage. Dr. A. H. Hilsman lead the discussion.

The next chart was interpreted by Dr. J. P. Tye, which recorded a case of epilepsy of many years' duration. The patient had had four attacks in one day, the last being very severe, the patient falling and striking the head on concrete, producing a simple fracture, without compression, of frontal bone extending into right orbit. He was taken to the hospital in coma for observation, and spinal puncture was done, revealing bloody fluid, which was not under abnormal pressure. There was a history of cardiac symptoms of several years' duration. Expectant treatment was instituted, but the patient began developing symptoms of cardiac failure, terminating in death on the sixth day while still in coma.

Dr. J. M. Barnett lead the discussion, dividing into:

(1) Skull, (2) Head, (3) Brain injuries, saying that the leading authorities were not agreed as to the necessity of spinal puncture in such injuries, but that they were agreed that only 8 per cent of such injuries revealed a bloody spinal fluid, the other 92 per cent showing a clear fluid, although they might be in just as urgent need of surgical interference. He further stated that said authorities were agreed upon the all-important element of *time*—that is, never be too hasty, but take time enough to make a diagnosis, whether it takes one or twenty-four hours.

Dr. A. H. Hilsman next discussed a case of intestinal obstruction caused by a carcinoma of ascending colon. A resection was done in a one-step operation which later showed some leakage, the patient dying seven weeks later. Doctor Hilsman discussed interestingly the advantage of a two-step operation in cases of this kind, and really prefers it.

Dr. J. C. Keaton then presented a chart, because of its unusual interest, of a patient who is still living and improving. This was one of a lung abscess the size of a large lemon in the right lower lobe which followed immediately after the patient became strangled while a dentist was amputating her gums and applying plaster to control hemorrhage. This is the first illness that the patient had had in sixteen years except a light attack of influenza last winter from which the patient had entirely recovered. The plates and physical examinations revealed no other pathology of her lungs. She is getting splendid drainage, with no evidence of suction into any of the other lobes of her lungs. In view of these facts, together with evidence that she is gradually improving, he has not considered surgery essential in this case, but the lung is being treated through the bronchoscope, instilling certain antiseptics. Dr. I. W. Irvin discussed most interestingly the use of the bronchoscope in the treatment of lung abscess.

The following members were present: Drs. A. H. Hilsman, J. M. Barnett, I. W. Irvin, J. A. Redfearn, J. P. Tye, W. S. Cook, J. C. Keaton, L. E. Welch, J. C. Brim, I. M. Lucas, and N. R. Thomas. The absentees were: Drs. N. E. Benson, Hugo Robinson, E. F. Sapp, A. S. Bacon, F. K. Neill, and T. C. McDowell.

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#### FIGHT MALARIA NOW

Now is the time to do a good job in fighting malaria. It is always the right time to ditch for pond drainage. Drainage is the most fundamental of anti-malarial work. The eradication of the mosquito-breeding places is most necessary, but of all the times to do good work on the carrier of the malarial parasite in the blood stream, it seems that the best should be the winter time. Everyone who has had malaria should take the full quinine treatment now. If the population were given thorough treatment there would be no malaria parasites for the mosquito to carry to a new victim next spring. We urge everyone to take the quinine and clear up the menace so far as he or she is concerned.—Georgia's Health, Atlanta, November 15, 1930.



# THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

DECEMBER, 1930

## THE SEASON'S GREETINGS

*To each and every member of the Association we extend sincere greetings and best wishes for a Merry Christmas and a Happy New Year. May God's choicest blessings be showered upon you and yours during this Yuletide Season.*

## "MEDICINE MAN"

### *Past and Present*

"God, and the doctor we alike adore,  
Just on the brink of danger, not before."

Many years before DeSoto made his famous march through Georgia in quest of gold, and centuries prior to the landing of Oglethorpe on the bluff at Savannah, several tribes of Indians inhabited the territory now called Georgia.

These Indians were considered savages. Despite their low standing in the scale of civilization, they had doctors, or "medicine men", who outranked all others in influence throughout the tribes. The medicine men sat in the highest councils. No question of importance could be decided without their advice, while even so grave a procedure as war could not be undertaken without the "medicine man's" consent. The standing of the "medicine man" was exemplified by Tomochichi sending his medicine man to greet Oglethorpe who had arrived with a ship load of colonists.

This high standing of the "medicine man" could be accounted for in part by the fact that he was in a measure of dual personality, blending the spiritual with the physical.

Of seventy doctors who had filled the position either of governor or lieutenant governor in the U. S. from 1620 to 1910, and of two hundred and eighty physicians who had been members of Congress, the great majority antedated the War Between

the States, since when only an occasional name appears.

During the earlier days of our State doctors wielded a powerful influence. Frequently a doctor combined the triumvirate of teacher, doctor and preacher. Later we find such men as Noble Wimberly Jones, Lyman Hall, Nathan Brownson, Geo. Wells and scores of others, taking outstanding parts in all social, political and religious activities. Generations ago, the family doctor was looked upon by most patients with a spirit of reverence. With the development of the State, this spirit of reverence has gradually waned, the doctors have rapidly disappeared from the forum and the hustings, and the medical mind is rarely met in the great councils of the states and nation.

If, as Stevenson's "Tribute to the Physician" beautifully places the doctor as "the flower of our civilization, and almost as a rule belonging to that class of men that stands above the common herd," why is the profession allowing itself to drift away from that

*The JOURNAL would like to record the scientific work of Georgia doctors. It earnestly requests, therefore, that each physician in the State who publishes a contribution in some other medical periodical to submit an abstract of the article for these columns.*

position of its greatest influence and usefulness, to which it belongs almost by divine right?

Today, as perhaps never before, there is need of real men, to direct and educate the youth of the country, to help frame laws toward improving the health of the nation; men to see that graft is eliminated and the people's wishes are executed at elections, and a thousand and one services tending to clarify and uplift the social and political strata of our present civilization.

Few doctors seem to realize the dynamic influence that lies dormant within the lines of our profession, and just as few evince scant appreciation of the importance of medical training to the community, beyond the close lines of practice.

At no time since Georgia was an infant colony has she needed just this influence

more. Since she has rapidly gone backward during the last ten years, the favorite theme at the sociological clubs being "What is the matter with Georgia," was there ever a more propitious time for the doctors to put their shoulders to the wheel and help the state to regain in a signal way the title of Empire State of the South?

There is not a home in Georgia that is not influenced by the personal contact of some doctor, and influenced at a time and under conditions calculated to make it most telling. If necessary let each doctor turn back a century and assume the combined role of doctor, teacher and preacher, until our "medical men" have won the same high place in our civilization that the "medical men" of the savages held in theirs.

Then the profession will again be enshrined in the heart of the commonwealth, Georgia as a whole will be thinking in bigger terms and seeing with a broader vision, and the poet will no longer feel the need of singing,

"God, and the doctor we alike adore,  
Just on the brink of danger, not before."

J. CALVIN WEAVER, M.D.

## SOUTHEASTERN SURGICAL CONGRESS

MARCH 9-10, 1931

The Southeastern Surgical Congress announces a tentative program for the next annual assembly, which will be held at the Biltmore Hotel, Atlanta, March 9-10, 1931.

The program committee has secured a group of distinguished surgeons and internists to present papers and hold clinics. The completed program will be mailed out at an early date to every physician in the Southeastern States. The tentative program, accepted to date, follows:

### *Authors and Titles*

- W. Wayne Babcock, Philadelphia, Pa.  
"Vaginal Hysterectomy."
- E. G. Ballenger, Atlanta, Ga.  
Title will appear in official program.
- J. F. Barnhill, Miami Beach, Fla.  
"Focal Infection in Relation to General Systemic Diseases."
- Lewellys Barker, Baltimore, Md.  
"The Necessity for Close Relationship Between the Modern Internist and the Up-to-Date Surgeon."
- V. B. Blair, St. Louis, Mo.  
"Plastic Surgery."
- Willis C. Campbell, Memphis, Tenn.  
"Ununited Fractures."
- R. C. Coffey, Portland, Ore.  
"Transplantation of Ureters Into the Large Bowel When Necessary to Eliminate the Bladder as a Reservoir for Urine."
- George W. Crile, Cleveland, Ohio.  
"The Kinetic System and Its Control."
- J. B. Deaver, Philadelphia, Pa.  
"Diagnosis and Management of Acute Abdominal Conditions."
- Chas. E. Dowman, Atlanta, Ga.  
"Diagnosis and Management of Brain Injuries."
- F. B. DuBose, Selma, Ala.  
"Observations on Diagnostic and Therapeutic Paravertebral Block."
- John Erdman, New York City.  
"Tumors of the Colon."
- LeGrand Guerry, Columbia, S. C.  
"Effect of Pregnancy on a Case of Post-operative Parathyroid Tetany."
- Michael Hoke, Atlanta, Ga.  
Title will appear in official program.
- J. S. Horsley, Richmond, Va.  
"Diagnosis and Management of Peptic Ulcer."
- Chevalier Jackson, Philadelphia, Pa.  
"Diagnostic Bronchoscopy."
- J. A. Killian, New York City.  
"Biochemistry."
- F. H. LaHey, Boston, Mass.  
"Diagnosis and Management of Thyroid Pathology."
- Howard Lillenthal, New York City.  
"Diagnosis and Treatment of Common Chest Conditions."
- J. F. McCarthy, New York City.  
"Address on Urology."
- J. T. Moore, Houston, Texas.  
"The Fourth Epoch in Treatment of Cancer of the Breast."
- John T. Moorhead, New York City.  
"The Surgical Knee."
- Hubert A. Royster, Raleigh, N. C.  
"Address on the Appendix."
- H. R. Shands, Jackson, Miss.  
"The Wright Method of Treating Leg Ulcers."
- Lawson Thornton, Atlanta, Ga.  
"Fractures: Some Methods of Treatment."
- Hugh H. Young, Baltimore, Md.  
"Differential Diagnosis and Management of the Senile Prostate."

## VIEWS, REVIEWS, PERSONALS

By JEROME JONES

In the glamour of political and civic organizations it is so easy to overlook organizations which may, after all, be affecting most vitally the body politic. Take, for instance, the Medical Association of Georgia, of which a distinguished Cuthbert physician, Dr. G. Y. Moore, is president, and an equally distinguished Atlanta physician, Dr. Arthur G. Fort, is president-elect. We never hear of any great campaign, but we are almost daily seeing evidences of the work which the Association is sponsoring. So far as we know they have never featured programs, platforms, etc., as do political organizations. But we are quite sure that they have both a program and a platform. We owe much of the present emphasis on good health to the quiet work of our good doctors. They are deserving more and more our appreciation and support. In many respects the medical fraternity is showing the way to every organization or group of people who would do good. They are seeking to prevent, to cure, but first honestly trying to find the cause and apply the remedy. The medical profession is one group of people which is striving harder every day to eliminate the very thing out of which comes their livelihood, disease and sickness. In fact, the medical fraternity comes nearer than any other we know of having a real social vision and a social outlook.—*The Journal of Labor, Atlanta, Ga., November 28, 1930.*

### FULTON COUNTY HEALTH DAY PROGRAM

In connection with the efforts of different public health organizations in Fulton County to put over a Health Week last May, the Fulton County Schools, under the direction of R. L. Ramsey, elementary supervisor, planned and successfully carried out an elaborate health pageant. It was presented on the race track in front of the grandstand at Lakewood Park before an audience of over six thousand people.

The aim of the Health Week, as expressed by the leaders of the public health organizations, was to make the public mindful of its own health and to stimulate interest in public health as a preventive method rather than a corrective process for ills already incurred. They believe that through wide publicity and an intense program the citizens of the county can be educated to the right outlook on public health. The school officials,

realizing that the best way to educate the citizens of Fulton County was to begin in the schools, worked out a program which had the idea of health education as a basis.

The aim of this program was expressed in a note which was published on the printed program of the pageant: The exercises of the day have been presented in the interest of "Good Health" with the hope that we might enlist the support of the parents in behalf of the children of the Fulton County Schools. Scholarship, attendance, efficiency, general well-being and the joy of living are all based on good health and a sound body. We solicit your help and co-operation in the development of personal habits in eating, sleeping and daily living which build strong bodies and sound minds.

The program had four main parts, the first of which was devoted to Maypole Dances presented by ten of the grammar schools. These showed that grace and beauty can accompany healthful exercise. The second part was devoted to the pageant proper. In it eighteen groups from different schools each presented to the King and Queen of Health a demonstration of personal habits and practice which contribute to good health.

The parts of the King and the Queen were taken by Harold Walker, a student of Russell High School, and Martha Burson, of Fulton High School. These two students were selected by a committee including Dr. James N. Brawner, Dr. Frank Wells, Mark S. Dougherty and Mrs. D. P. Yates, county nurse, on a basis of physical fitness and general good health.

The stunts presented before them brought out the need of baths, exercise, sleep, the care of the teeth, the use of the handkerchief, and the importance of water, milk, vegetables, and fruits. The contributions to health of such extracurricular activities as the Boy Scouts, Girl Scouts, Camp Fire Girls and the Hi-Y were attractively and practically brought out.

In the third part twelve schools marched out on the race track and formed the letters to spell Fulton County. The last event was a grand health parade in which 1,002 Fulton County school children who had perfect attendance records for the 1929-1930 school term took part. The schools marched in the order of their year's attendance percentages. The Harris Street School of East Point led the other schools with an average of nearly 98 per cent. There were two high school students, Mary Belle Dennard, junior at Russell High, and Charles Reddick, sophomore at Russell High, who had not missed a day in school or been tardy in their entire school attendance.



Music for the parade as well as for other parts of the program was furnished by the bands of Fulton High School and Russell High School. Loving cups were won by the Alonzo Richardson School for the best Maypole Dance and by the Hammond School for the best health habit stunt.

A most unusual feature of this program is the fact that 37 schools from widely separated parts of the county participated in it and it was put on without a single rehearsal. The Fulton County School System had never attempted such a program before but it was entirely successful from every standpoint.

MARIE LONG.

835 Zachery Street, S. W., Atlanta.

## 1930 HONOR ROLL\*

### COUNTY SOCIETIES

1. Randolph County, Dr. G. Y. Moore. Cuthbert, September 5, 1929.
2. Barrow County, Dr. W. L. Mathews, Winder, December 5, 1929.
3. Dougherty County, Dr. I. M. Lucas, Albany, December 28, 1929.
4. Lamar County, Dr. J. M. Rogers. Barnesville, January 6, 1930.
5. Turner County, Dr. J. H. Baxter, Ashburn, February 10, 1930.
6. Monroe County, J. O. Elrod, Forsyth, February 18, 1930.
7. Wayne County, Dr. A. J. Gordon. Jesup, March 20, 1930.
8. Stephens County, Dr. C. L. Ayers. Toccoa, April 2, 1930.
9. Upson County, Dr. R. L. Carter, Thomaston, April 3, 1930.
10. Lowndes County, Dr. Bennett G. Owens, Valdosta, May 5, 1930.
11. Ware County, Dr. W. L. Pomeroy, Waycross, May 21, 1930.
12. Cobb County, Dr. L. L. Welch. Marietta, August 2, 1930.
13. Crisp County, Dr. J. N. Dorminy, Cordele, September 6, 1930.
14. Terrell County, Dr. Logan Thomas. Dawson, September 13, 1930.

### 1931 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 4, 1930.
2. Butts County, Dr. Robert L. Hammond, Jackson, December 2, 1930.

\*Names of county societies are placed on the honor roll when all eligible doctors in the county are members of the Association.

## TREATMENT OF SECONDARY ANEMIA

Herbert Z. Giffin and Charles H. Watkins, Rochester, Minn. (*Journal A. M. A.*, August 23, 1930) relate their experiences with fetal liver and bone marrow. This general review of 120 cases demonstrates that desiccated fetal liver is effective in cryptogenetic, hemorrhagic, and infectious types of secondary anemia in which the morphologic features are those seen in the hemoglobin deficiency type of secondary anemia. Its efficacy has not yet been compared with that of adult liver. It has not been supplemented with iron in a large group of cases, nor have the fractions of fetal liver been tested. These are all problems for the future. Experimental work, both in nutritional and in chronic hemorrhagic anemia, and also clinical experience, indicate the effectiveness of iron in large doses. Moreover, reports show that, both from an experimental standpoint and from clinical experience, iron supplements the action of other substances, and in addition to providing a supply of iron it probably has a "salt action". A balanced diet, rich in vitamins and hemoglobin-building foods, is frequently the only regimen necessary for the cure of secondary anemia. Such diets, together with large doses of iron, constitute a logical procedure. Transfusion should be regarded as an emergency measure or a preliminary adjunct to the treatment of secondary anemia. At the present state of knowledge there seems to be no adequate justification for the administration of arsenic in secondary anemia in the absence of syphilis. In their experience with ninety-eight cases of chronic secondary anemia of the semiaplastic type, consistent effect from the use of bone marrow was not noted. There is at present no satisfactory clinical evidence of the effectiveness of spleen or bone marrow. While intravenous and intramuscular medication and subcutaneous injections of whole blood are rather widely used in the treatment of secondary anemia, the literature is barren on the subject and one is forced at present to conclude that they are at least unnecessary procedures. The results of experimentation on animals, clinical investigation, and clinical trial indicate that in the cryptogenetic, chronic hemorrhagic, and chronic infectious types of anemia, and in those due to dietary deficiency first place should be given to a balanced diet, rich in vitamins and hemoglobin-building substances such as whole adult liver, whole fetal liver, kidney, red meats, apricots, and peaches and prunes, together with large doses of iron and 90 grains (6 Gm.) a day of ferric citrate, equivalent to 1 Gm. of metallic iron. There is apparently at present no good reason for the use of arsenic, splenic extract, bone marrow, copper, or intravenous and intramuscular medication. Clinical trial has indicated that time is an important element, because hemoglobin-building factors must be produced before hemoglobin itself can be formed. The effects of whole adult liver, whole fetal liver, and especially the various fractions of liver, singly and in combination with iron, copper, and other metals, must be investigated in the various types of anemia seen in man.

## GEORGIA STATE NURSES ASSOCIATION

### *Officers*

President—Miss Lucia Massee, R. N., Cuthbert  
 First Vice-President—Miss Dora A. Kershner, R. N., Macon.  
 Second Vice-President—Mrs. Mae M. Jones, R. N., Milledgeville.  
 Secretary—Miss Winnie B. Wood, R. N., Macon.  
 Treasurer—Miss Jane Van De Vrede, R. N., Atlanta.  
 Miss Jane Van De Vrede, R. N.  
 Executive Secretary

### *District Presidents*

First—Mrs. Dorothy Treacle, R. N., Savannah.  
 Fourth—Miss Eva Chalkley, R. N., Columbus.  
 Fifth—Mrs. Sue B. Paille, R. N., Atlanta.  
 Sixth—Miss Dora A. Kershner, R. N., Macon  
 Seventh—Miss Shirley Hamrick, R. N., Cedartown.  
 Eighth—Mrs. W. C. Thurmond, R. N., Athens.  
 Ninth—Miss Ruby Falls, R. N., Gainesville.  
 Tenth—Mrs. Joseph Akerman, R. N., Augusta.

### *Headquarters*

131 Forrest Avenue, N. E., Atlanta.

## SUMMARY OF THE REPORT OF THE SECRETARY OF STATE BOARD OF EXAMINERS OF NURSES FOR GEORGIA

The following excerpts from the report of Miss Jane Van De Vrede, Secretary of the State Board of Examiners of Nurses for Georgia, given during the convention of the Georgia State Nurses Association in Atlanta, in October, are of interest to nurses, doctors, hospital people, and the general public.

In summing up the work of the Board for the past year, Miss Van De Vrede stated that thirty-two schools of nursing connected with general hospitals throughout Georgia had been visited during 1930.

"I found all schools most co-operative. In most cases visits were eagerly looked forward to, apparently, and the way in which physicians and hospital executives set aside business of the moment for the consideration of the school evidenced the sincere effort that is being made to increase the facilities for the preparation of the nurse. This has special significance in view of the fact that many of the hospitals have been faced with increased financial burdens, and the individual incomes of the owners of hospitals greatly curtailed by the general depression.

"Practically all physicians are agreed that nurses should be better prepared to do the work they are called upon to do, and that a high school education is necessary. . . . Of the 467 graduates making application for registration this year (of which 375 became registered), 215 had four years of high school work, or more; a few had college credits; seventy-six had three years of high school education; 163 had two or more years of high school, or from eight to ten units; thirteen, with less than eight units, had been accepted by training schools, but deficits were made up before being admitted to examina-

tion. This is a marked improvement over the 1929 statistics.

"By Jan. 1, 1932, all students entering schools must be graduates of accredited four-year high schools.

"*Age Requirement:* The law requires that applicants for registration be 21 years of age. No student who has not passed her eighteenth birthday should be accepted by schools.

"*Curriculum:* The minimum standards of the Board are those of the Standard Curriculum for 1919, reprinted edition, as compiled by the National League of Nursing Education. Standards are outlined for the schools of limited resources. That this minimum is not thoroughly taught in many of our schools there is no doubt. Out of 375 white nurses applying for registration, there were forty-three failures; and out of fifty-one colored nurses applying for registration there were twenty-two failures. Some of these nurses stood more than one examination.

"Failures centered in the subjects of Anatomy and Physiology, Materia Medica (including Chemistry), Dietetics and Ethics. Lack of teaching methods and exact procedure was reflected in Practical Tests.

"All of our schools need more supervision of students. The physician gives relatively less time at the bedside of the patient because he has other and definite aids to diagnosis and treatment; consequently the student nurse of today misses the very valuable training her predecessors received from the physician at the bedside. The application of the Case Study method to nursing compensates to some extent for this, and it inserts interest, enthusiasm and a challenge that the curriculum lacks in some schools; but this method implies teaching supervisors who can help the student select and work up her cases from a nursing standpoint.

"Thorough instruction in Dietetics is

needed in our schools, and the Pediatric service should be increased in practically every school."

### *Report of the Grading Committee*

First report of the Grading Committee has been received by our Georgia schools. Of the items included, only two were well above the average of all schools. These were the time allotted students for meals and hours of sleep secured by students! In hours of night duty our students scored among the very lowest percentages. The ruling of the State Board is that students must not work more than ten hours on night duty, and that preferably they should have two hours' relief during a twelve-hour night, rather than ten straight hours. This can be arranged in any hospital by internal adjustment.

### *Distribution of Nursing Service*

An analysis of the distribution of the 3,317 graduate nurses qualified to practice in Georgia in 1930 shows fifty-nine counties with no registered nurses residing within the county, and thirty-seven with only one such nurse; while only four of the 161 counties in the State have over 100 registered nurses. However, in the centers of population there is an oversupply of nurses. In Greater Atlanta there is one graduate, registered nurse for every 355 persons, and in the three other leading cities of the State the situation is almost a parallel one.

Naturally there is serious unemployment among nurses in our cities particularly. All nurses, especially superintendents of nurses, should give serious thought to this question, and wherever possible augment student with graduate service. Are we doing all we can to assist in solving the problems connected with the maintenance of schools and the extension of nursing services to the community?"

### *Board Recommends Institute*

Recommendations for an institute for superintendents of nurses and boards of trustees of schools, to be held next year, were included in the report.

\* \* \*

### RELAYED FROM NATIONAL HEADQUARTERS

### *"Unemployment"*

Janet M. Geister, *Headquarters' Director, American Nurses Association*—"Unemployment is our greatest problem at the present time. We are acutely aware of it, and are giving it our major attention. The reasons

for unemployment furnish us with a basis for attacking the problem, but it is something that will require the attention and effort of every individual nurse, as well as organized nursing, if any headway is to be made in its solution. Nursing is at a crossroads. We are faced with too many nurses within the profession, and we are graduating too many nurses each year. There has been poor distribution of nursing service, and the fluctuation in the stock market has made the situation more acute. A change in the types of nursing service offered to the public is essential if any improvement in unemployment is to be expected. *The use of graduate nurse service in the hospital* to replace that of student nurse service has been suggested. The study of the use of the graduate staff in the hospital is to be the next study, and additional studies of hourly and group nursing are to be made also."

### *Private Duty in 1930*

Jean S. Morgan in the *Bulletin of the Texas State Nurses Association*—"Trained hands! How grateful have I been for them in the days of slow convalescence. Since the comfort of the patient should be the first consideration, the nurse's hands should be trained to administer the patient's needs with the least possible taxing of the vitality of the patient. Do not be a private duty nurse or any sort of a nurse if all there is seen in it is drudgery. The ideal private duty nurse forgets all else in the comfort and well-being of the patient."

James Fitzgerald ("America," August 23, 1930): "I am only one individual, but I am one, mind and body; and when I am sick, I am sick all over—mind and body are sick together. I don't expect that my doctor will be interested rightly in any part of me but my body, my organic sickness, my symptoms. But I want my nurse to be interested in the whole of me, and in particular in the mental implications of my illness. I wish that my nurse will treat me as a human being and not as a case; and as one human being and not a half dozen. I mean, I don't want to be treated half the time, for example, as 'the appendectomy in Room 13' and half the time as 'the crank in Room 13'. I want to be treated as the poor devil in Room 13 who is about to have, who is having, or who has had, his appendix out—my own personal and private appendix."

### *Concerning Specialization*

At this difficult time of upset in the balance of supply and demand, "the determination and initiative of the individual will measure her progress out of discontent into



satisfaction", stated Mary E. Stebbins, Acting President, Missouri State Nurses Association, in her presidential address given recently at the annual meeting of that group. She said: "For the present large group of already developed private duty nurses, constructive action on the part of the individual herself would seem to offer hope and promise of relief and release. She may first face her predicament as it is: (a) too many nurses of one type, in one place—better distribution would disperse congestion; (b) too many nurses professionally prepared to render the same type of private duty service, while other types of private duty service are demanding specially prepared nurses.

"Special services require specialized education and experience, some of which it would be worth her while to acquire. There are some opportunities by which such specialized training can be acquired at little or no expense save time and energy while under expert supervision and receiving the necessary education. The determination and initiative of the individual will measure her progress out of discontent into satisfaction."

*The December Number of the American Journal of Nursing*

Quite appropriately, the December issue of the *American Journal of Nursing* presents four Christmas stories in a symposium, "Christmas in the Hospital." The first is "In an English Hospital", by Hester Viney of England; the second, "In a Southern Hospital," Mrs. Robert Jolly of Texas. "In a Philadelphia Hospital" is the third, and "In a Denmark Hospital", the fourth.

Other articles in this number include "Pernicious Anaemia", by James Bordley III, M.D., of Maryland; "Nursing Costs," by Phoebe Gordon, of Minnesota; "The Nurse's Responsibility in Diphtheria," by Virginia Boyer Miller, R. N., of Illinois; "Nutrition and the Health Program," Sister Gonzaga, R. N., of Louisiana; "Home Nursing in Pneumonia," Vesta Faulkner, R. N., Ohio; "Nursing Medical Patients—Problems With Neurological Patients," Florence K. Wilson, R. N., Ohio; "Nursing in Syria," Sarah G. Shala, Syria; "Costs of Education," Mae Ayres Burgess, Ph.D.; "The Teaching of Prevention" (Department of Nursing Education), Annie W. Goodrich, R. N., and several additional and no less noteworthy articles.

The Standard Curriculum presupposes that the *American Journal of Nursing* will be used as a textbook during the senior year, and we hope that all our schools will soon adopt it as such. The above indicates what schools miss where the *Journal* is not used.

## NURSING ASSOCIATION

The following is a correction of statement in the July issue of THE JOURNAL in report of the Biennial Convention of Nursing Associations:

At a business meeting of the National Organization for Public Health Nursing, held in Milwaukee during the Biennial Convention, the following suggested revision of the By-Laws was presented to the membership:

That applicants for active nurse membership in the National Organization for Public Health Nursing after January 1, 1932, be members of the American Nurses Association or of the National Association of Colored Graduate Nurses.

This revision was lost; and the present requirements for N. O. P. H. N. membership remain—namely:

"Graduation from a training school for nurses connected with a general hospital having a daily average of thirty patients or more and training in one or more hospitals of not less than two years. Training shall include practical experience in caring for men, women, and children, together with the theoretical and practical instruction in medical, surgical, obstetrical, and pediatric nursing.

"In those States where nurse practice laws have been enacted, registration shall be an additional qualification."

A resolution passed after the failure of this change in By-Law explains the action of the National Organization for Public Health Nursing:

"WHEREAS, The N. O. P. H. N., at its business session on June 9, 1930, voted to retain its present nurse membership requirement instead of adopting the requirement of A. N. A. membership; and

"WHEREAS, In the discussion of the N. O. P. H. N. membership present, the following points were emphasized and questions asked:

"1. That it is very important that public health nurses should be members of their professional organization:

"2. That it is open to question whether this desirable end can best be furthered through compulsion or education;

"3. That it is questioned whether it is sound organization to make a portion of the membership of one national organization such as the N. O. P. H. N. depend upon membership in another national body;

"4. And finally, that in view of the fact that A. N. A. membership is built up on the basis of membership in alumnae associations, which does not seem the desirable unit for membership in a professional organization nor for any allied group; therefore, be it

"RESOLVED: That this summary of the discussion, which took place in the meeting of the N. O. P. H. N., be presented to the A. N. A. with reaffirmation of our belief in and allegiance to our professional organization and with the suggestion that the A. N. A. give serious consideration to the adoption of a geographical membership basis, beginning with the district association, which would correspond to the plan of membership in other professional bodies, and would remove a practical difficulty, which now stands in the way of a more widespread membership in the A. N. A."

#### NEWS ITEMS

The Bartow County Medical Society met on November 12th. Officers were elected for next year.

Dr. A. C. Shamblin, formerly of Rome, has been elected Commissioner of Health for Bartow County and removed to Cartersville.

The Third District Medical Society met at Americus on November 19th. The scientific program consisted of the following titles for papers: "The Importance of Children's Teeth," by D. L. Smith, D.D.S., Cuthbert; "The Need of Public Health Education by the Physicians and Laity," by Dr. T. J. McArthur, Cordele. The papers by Drs. Smith and McArthur were discussed by Drs. J. W. Chambliss, Americus, and Guy G. Lunsford, Cordele. "Cardiac Neurosis," by Dr. L. Minor Blackford, Atlanta; "Complications of Hypertension," by Dr. R. Hugh Wood, Atlanta. Papers by Drs. Blackford and Wood were discussed by Drs. C. P. Savage, Montezuma; Robert C. Pendergrass, Americus; C. W. Roberts, Atlanta; Allen H. Bunce, Atlanta. "Recurrent Hyper-trophied Prostate—Report of Case," by Dr. E. B. Anderson, Americus. Doctor Anderson's paper was discussed by Drs. Charles Adams, Cordele, and T. M. Adams, Montezuma. Addresses by Dr. G. Y. Moore, Cuthbert, and Dr. Arthur G. Fort, Atlanta, President and President-Elect of the Association, respectively. Banquet was given at the Windsor Hotel. Dr. J. W. Chambliss, Americus, was toastmaster.

Dr. Arch Avary, Jr., announces the opening of his office for the practice of internal medicine at 754 Juniper Street, N.E., Atlanta.

Dr. John W. Mobley, Jr., formerly of Milledgeville, has moved to Pelham for the practice of medicine.

The Woman's Auxiliary to the Baldwin County Medical Society and the local Parent-Teacher Association have completed arrangements to furnish a supply of milk to the undernourished school children of Milledgeville.

The Spalding County Medical Society met at the Griffin Hospital, Griffin, on November 18th.

Grady Hospital and Steiner Clinic, Atlanta, on and after January 1st, will be under the management of a board of trustees, which will consist of five private citizens, chairman of the hospital committee of the council, and the mayor.

The University of Southern California, Los Angeles, announces that grants have been made to Drs. Harry J. Deuel, and Clinton H. Thienes by national scientific organizations. A grant of \$300 has been made to Doctor Deuel for research work on the determination of the antiketogenic value of different carbohydrates. Doctor Thienes has been given a grant of \$500 for research work in "The Relationship Between Myenteric Plexus and Ganglia and the Mesenteric Nerves". Both are members of the faculty of the School of Medicine of the University.

The National Committee for Mental Hygiene held its twenty-first anniversary meeting at the Biltmore Hotel, New York City, on November 13th. The development of a nation-wide program of research with American universities as a next step in the extension of the activities of the committee was announced as a major objective. The effort will be made under the leadership of Dr. C. M. Hincks, who is the new General Director of the organization, succeeding Dr. Frank E. Williams, who will retire on January 1st after fourteen years of service.

W. R. M. Wharton, Chief of the Eastern District of the Federal Food and Drug Administration, has recently added six additional radio stations to the list for broadcasting the "Read-the-Label" talks which are carried through twenty-five nations. Drawing upon his twenty years of experience as a Federal food official, he points out the meaning of label statements on food and drug containers and shows how the consumers and honest firms in the food and drug business may protect themselves against fraud and obtain the greatest economic benefit from the Federal Food and Drug Act.

The Medical Corps of the United States Navy last year appointed ten graduates from Emory University School of Medicine as a part of its total appointments of eighty-three. More than 400 seniors from thirty-six medical schools took the examinations for the Navy Medical Corps. Every Emory medical student who took the examination received an appointment. This was the largest group from any school to pass the examination.

The Jackson County Medical Society held its regular monthly meeting at the Harrison Hotel, Commerce, on November 6th. Dr. M. B. Allen, Hoschton, read a paper entitled "Cardiopathies".

On call of the Surgeon-General of the United States Public Health Service, a conference of health and welfare workers was held in Washington, D. C., on October 29th, to consider ways and means of controlling the high mortality of colored people in rural communities and congested cities.



The Iodine Educational Bureau announces that advances have been received of successful experiments in using iodized eggs in Germany.

The Georgia Medical Society (Chatham County) held its annual business meeting on November 11th. The entire meeting was devoted to reports of officers and committees and the transaction of other business. Refreshments were served.

The Davis-Fischer Sanatorium, Atlanta, postponed its staff meeting which was scheduled to be held on November 13th, on account of the meeting of the Southern Medical Association, which was held at Louisville, Ky., November 11 to 14.

The Clarke County Medical Society held its monthly meeting at the Athens General Hospital, Athens, on November 6th. Dr. C. J. Decker gave a lecture on the Origin, Past and Present History of Bubonic Plague, Cholera, Typhoid Fever, and Leprosy.

The Macon Medical Society (Bibb County) held its monthly meeting at the Macon Hospital on November 4th. Dr. J. A. Fountain read a paper entitled "Essential Hypertension"; Dr. W. A. Williams reported "Clinical Cases".

A Conference on Malaria was held at Cuthbert on November 6th. The following speakers were on the program: Dr. Guy G. Lunsford, Cordele; Dr. G. Y. Moore, Cuthbert, President of the Association; Dr. Allen H. Bunce, Atlanta, Secretary-Treasurer of the Association, and Dr. M. E. Winchester, Director of the Division of County Health Work, State Board of Health.

The Georgia Medical Society (Chatham County) met on November 25th. Dr. Kenneth M. Lynch, Charleston, S. C., read a paper entitled "The Value of the Clinico-Pathology Conference in County Medical Society".

The Sixth District Medical Society met at the Hotel Dempsey, Macon, on December 3rd. The scientific program consisted of the following titles of papers: "Pneumonia and Its Treatment," by Dr. John F. Anderson, Hillsboro; "Scabies," by Dr. J. M. Sigman, Macon; "Bicornate Uterus—Case Report," by Dr. A. R. Rozar, Macon; "Pernicious Anemia—Case Report," by Drs. Charles C. Hinton and W. W. Chrisman, Macon; "Radium in the Treatment of Malignancies," by Dr. Jas. A. Fountain, Macon; "Discussion—Diseases of the Thyroid Gland," by Dr. Charles H. Richardson, Jr., Macon; "Surgical Renal Tuberculosis," by Dr. W. L. Grantham, Asheville, N. C.

Dr. E. S. Deaver, formerly of Lexington, has moved to Union Point for the practice of medicine.

The Burke County Medical Society met at the office of Dr. R. L. Miller, Waynesboro, on December 4th. Dr. Cleveland Thompson, Millen, read a paper on "A Review of Recent Work by Dr. B.

Ferguson on Stimulated Leukocytosis". The members of Jenkins County Medical Society were invited to attend the meeting. Dinner was served at the Anthony Wayne Hotel.

## SOUTHERN MEDICAL ASSOCIATION

### *Louisville Meeting*

The twenty-fourth annual meeting of the Association was held at the Columbia Auditorium, Louisville, Ky., November 11, 12, 13, 14, 1930.

Scientific exhibits on display by physicians from Georgia were as follows:

Dr. Edgar F. Fincher, Jr., and Dr. W. A. Smith, Atlanta: Microscopic neuropathology, consisting of (1) microscopic slides of tumors of the central nervous system and (2) microphotographs demonstrating the histological development of the various cell types comprising the different gliomata.

Dr. W. W. Anderson, Department of Pediatrics, Emory University, Atlanta; Photographs of clinical conditions in children.

Dr. Murdock Euen, Atlanta; Specimens removed from trachea, bronchi and esophagus.

Physicians from Georgia and titles of papers on the several sections of the program were as follows:

Dr. Allen H. Bunce, Atlanta, "Differential Diagnosis of Abdominal Conditions"; Lantern slides.

Dr. Stewart R. Roberts, Atlanta; "The Heart in Pregnancy."

Dr. Jno. B. Fitts, Atlanta, "Cancer of the Stomach in the Southern Negro: A Study of Fifty Cases." Discussed by Dr. J. C. Johnson, Atlanta.

Dr. W. C. Waters, Jr., Atlanta, "Spontaneous Hypoglycemia: The Role of Diet in Etiology and Treatment."

Dr. Geo. F. Klugh, Atlanta, "Streptococci from Blood Cultures in Arthritis." Discussed by Dr. E. L. Bishop, Atlanta.

Dr. Jack C. Norris, Atlanta, "A Yeast, Pathogenic for Man and Animals." Discussed by Dr. Roy R. Kracke, Emory University.

Dr. A. J. Ayers, Atlanta, "Brucella Abortus Infection in Man: Clinical Manifestations and Diagnosis."

Dr. W. W. Young, Atlanta, "Play for Attention, a Key to Mental Prophylaxis."

Drs. E. C. Thrash and W. P. Baker, Atlanta, "Observations Based Upon the Treatment of Six Hundred Cases with Deep X-Ray Therapy."

Dr. J. W. Landham, Atlanta, "Radiotherapy in the Treatment of Uterine Fibroid."

Drs. R. M. and W. P. Harbin, Rome, "Acute Abdomen from Disease: A Review of 1,232 Cases with Reference to Problems Within the First Twenty-four Hours."

Dr. Jno. W. Turner, Atlanta, "Chronic Salpingitis."

Dr. H. M. Michel, Augusta, Chairman of Section on Railway Surgery, "Some Results of Crossing Accidents."

Dr. Geo. A. Traylor, Augusta, "Compression Fractures of the Vertebral Bodies."



Dr. Jas. R. Garner, Atlanta, "The Proper Study of Mankind Is Man."

Dr. Frank Eskridge, Atlanta, "Cicatrical Fixation of Ulnar Nerve: Release and Implantation."

Dr. Murdock Eguen, Atlanta, "Foreign Bodies in the Air and Food Passages."

Miss Jane Van De Vrede, R. N., Atlanta, "The Preparatory Technical Education of the Nurse."

#### Registration

Allen, H. W., Jr., Milledgeville  
 Anderson, Wm. W., Atlanta  
 Applewhite, J. D., Macon  
 Aven, C. C., Atlanta  
 Ayers, A. J., Atlanta  
 Ballenger, E. G., Atlanta  
 Bassett, V. H., Savannah  
 Bazemore, Wallace L., Macon  
 Boland, Frank K., Atlanta  
 Broadrick, G. L., Dalton  
 Bunce, Allen H., Atlanta  
 Butler, C. G., Gainesville  
 Byrd, Luther T., Atlanta  
 Clay, Grady E., Atlanta  
 Cofer, Olin S., Atlanta  
 Crawford, R. L., Locust Grove  
 Davis, B. B., Gainesville  
 Downey, J. H., Gainesville  
 Elliott, Wm. T., Augusta  
 Ellis, L. M., Washington  
 Elrod, J. O., Forsyth  
 Faggart, Geo. H., Savannah  
 Fincher, E. F., Atlanta  
 Fitts, Jno. B., Atlanta  
 Gaines, Lewis M., Atlanta  
 Garner, Jas. R., Atlanta  
 Garrard, J. L., Rome  
 Griffin, Archie, Valdosta  
 Griffiths, T. H. D., Albany  
 Harbin, W. P., Rome  
 Haygood, M. F., Alto  
 Hodges, J. H., Hapeville  
 Holmes, L. P., Augusta  
 Houston, Wm. R., Augusta  
 Hunt, K. S., Griffin  
 Kay, Jas. B., Byron  
 Kelley, D. C., Lawrenceville  
 King, J. L., Macon  
 Klugh, Geo. F., Atlanta  
 Kracke, R. R., Atlanta  
 Lancaster, E. M., Shady Dale  
 Landham, J. W., Atlanta  
 Lucas, W. H., Stillmore  
 Macaulay, H. A., Waynesboro  
 Matthews, M. F., Athens  
 McArthur, C. H., Rome  
 McCord, Jas. R., Atlanta  
 Michel, H. M., Augusta  
 Norris, Jack C., Decatur  
 Oppenheimer, R. H., Emory University  
 Palmer, J. W., Ailey  
 Paullin, Jas. E., Atlanta

Peacock, E. S., Harrison  
 Pendergrass, R. C., Americus  
 Pruitt, Marion C., Atlanta  
 Roberts, Stewart R., Atlanta  
 Rollins, J. C., Dalton  
 Routledge, A. F., Rome  
 Rozar, Allen R., Macon  
 Sharp, C. K., Arlington  
 Smith, Wm. A., Atlanta  
 Swanson, Cosby, Atlanta  
 Swint, R. C., Milledgeville  
 Thrash, E. C., Atlanta  
 Traylor, Geo. A., Augusta  
 Turner, Jno. W., Atlanta  
 Upshaw, Charles B., Atlanta  
 Walker, D. D., Macon  
 Whelchel, C. D., Gainesville  
 Williams, C. O., West Point  
 Williams, L. W., Savannah  
 Willis, L. W., Bainbridge  
 Winchester, M. E., Atlanta  
 Wise, B. T., Americus  
 Young, W. W., Atlanta

There were 1,613 physicians, 302 ladies, 142 medical students, and 146 exhibitors registered; total, 2,203.

Officers elected for the ensuing year were as follows: Dr. Felix J. Underwood, Jackson, Miss., President; Dr. W. Hamilton Long, Louisville, Ky., First Vice-President; Dr. W. G. Harrison, Birmingham, Ala., Second Vice-President.

The next annual session will be held in New Orleans, La.

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#### OBITUARY

*Dr. John A. Dunwody*, Brunswick; member; Emory University School of Medicine, Emory University, Georgia, 1885; aged 66; died at his home of pneumonia on November 27, 1930. He was one of the most prominent physicians and surgeons of South Georgia. Doctor Dunwody was a member of the Glynn County Medical Society and the American Medical Association. Surviving him are his widow; one daughter, Catherine, aged 3 years; two brothers, Gilliard Dunwody, Atlanta, and Mack Dunwody, Savannah; one sister, Mrs. Ella Wylly, Marietta. Funeral services were conducted from the St. Mark's Episcopal Church at Brunswick, and interment was in Savannah.

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*Dr. J. H. Randle*, Covington; member; Chattanooga Medical College, Chattanooga, Tenn., 1899; aged 60; died at his home on November 5, 1930. He was born and reared in Gilmer County near Ellijay. Doctor Randle was held in high esteem by all who knew him. He was prominent in his profession and active in civic and religious affairs. Doctor Randle was a member of the Newton County Medical Society and the American Medical Association. Surviving him are his widow; three sons, Fred, Horace, and John Ran-

dle, all of Covington. Funeral services were conducted from the residence by Rev. Walker Combs, pastor of the First Baptist Church. Interment was in East View Cemetery, Congers.

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*Dr. William Jackson Smith*, DeSoto; member; Kentucky School of Medicine, Louisville, Ky., 1890; aged 65; died at his home on November 8, 1930. He was a native of Oglethorpe and had practiced medicine in Sumter County for thirty years. Doctor Smith was widely known as a physician and farmer. He was a member of the Sumter County Medical Society and the Plains Lutheran Church. Surviving him are his widow; two daughters, Mrs. Emmett Ferguson and Miss Catherine Smith, both of DeSoto; one son, Col. W. J. Smith, Americus. Funeral services were conducted by Rev. E. G. Seckinger and interment was in the Oak Grove Cemetery, Americus.

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*Dr. John E. Toole*, Bainbridge; College of Physicians and Surgeons, Baltimore, Md., 1889; aged 62; died at his home on November 2, 1930. He had filled a long and useful career in the practice of his profession in Decatur and adjoining counties. Surviving him are his widow; one daughter, Mrs. Lester Holcombe, Valdosta; one son, Rohe Toole, Atlanta. Funeral services were conducted by Rev. H. H. Shell, pastor of the First Baptist Church, and interment was in Oak Cemetery.

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*Dr. Walter B. Hamby*, Atlanta; Emory University School of Medicine, Emory University, Georgia, 1888; aged 64; died at his winter home in Winter Haven, Fla., on November 6, 1930. He was born and reared on his father's farm in Gwinnett County. He began the practice of medicine in Marietta, then moved to Mabelton, and later to Atlanta. Doctor Hamby owned large interests in real estate located in and near Atlanta, also orange groves in Florida. He was a member of the Elks and Shrine, and director of the Citizens and Southern National Bank. Surviving him are his widow; five brothers, T. L. Hamby, Smyrna; Ben Hamby, Dallas, Texas; B. B. Hamby, Atlanta; T. K. Hamby, Tuscumbia, Ala., and Elijay Hamby, of Texas; two sisters, Mrs. Eula DeLaney and Mrs. Jennie Kelpin, both of Terrell, Texas. Funeral services were conducted by Rev. M. A. Cooper, pastor of the West End Baptist Church, from the chapel of Barclay & Brandon. Interment was in West View Cemetery.

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*Dr. William J. Brown*, Rome; Georgia College Eclectic Medicine and Surgery, Atlanta, 1883; aged 72; died at his home on October 31, 1930. He practiced medicine in Floyd County for more than forty years. Doctor Brown was an estimable gentleman and did an extensive practice. He was a member of the Maple Street Baptist Church. Surviving him are his widow; four sons, J. A. and W. J. Brown, Jr., both of Chattanooga, Tenn.; C. J. Brown, Birmingham, Ala.; A. D. Brown, Rome; two daughters, Mrs. Tona Brand, Rome, and Mrs. Myrtle Wheeler, Cullman, Ala. Funeral services were conducted by

Rev. H. F. Joyner from the New Hope Church in Paulding County, and interment was in the church cemetery.

### HEART IN PREGNANCY

A search made by William D. Reid, Boston (*Jour. A. M. A.*, Nov. 15, 1930), of the records of the Boston City Hospital for a period of twelve and a half years disclosed twenty-seven cases of definite stenosis of the mitral valve. Seven of these were in men. The average age at death of these twenty-seven patients was 43.2 years. The average age at death was 42.4 years for married woman with heart disease and 47.2 years for those that were unmarried. The married women in the group analyzed averaged 5.75 children. The mortality from cardiac disease in pregnancy is but slightly greater than that of cardiac patients of similar age in the general population. Probably 90 per cent or more of cardiac patients survive pregnancy and parturition. He concludes that married women with rheumatic heart disease die before their time because of the natural evolution of this disease rather than because of child-bearing.

### CARDIOVASCULAR DISTURBANCES

Twenty-four cases of heart disease in pregnant women are grouped in the order of seriousness and the various complications commented on by George Herrmann and E. L. King, New Orleans (*Jour. A. M. A.*, Nov. 15, 1930). Disturbances in the mechanism of the heart beat in pregnant women are especially stressed. The importance of electrocardiographic studies, repeatedly done, in gravidocardiac patients is emphasized. Bundle branch block, its serious significance and the hopeful possibility of the temporary transient nature of the condition are demonstrated. Auriculoventricular block, fibrillation, and the less serious abnormalities and their effects in the cardiac function are commented on and illustrated. The state of the heart muscle is of the utmost significance. The alleviation of congestive heart failure before permitting labor or surgical delivery to proceed is found to be paramount for success. Ether was found to predispose to fatal pulmonary edema in patients with the lung congestion of mitral stenosis. Of general anesthetics, ethylene is the choice as far as the cardiac condition is concerned, but local anesthesia is by far the safest to use. Acute rheumatic endocarditis occurring during pregnancy responded to treatment and subsided about as it does in nonpregnant individuals. Extensive and usually fatal pulmonary thrombosis is shown to occur relatively frequently in instances of serious idiopathic myocardial degenerative changes.

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The officers of the Fulton County Medical Society are now beginning their preparations for the entertainment of the members of the Association who may attend the eighty-second annual session to be held in Atlanta, May 12, 13, 14, 15, 1931. It is an excellent time for our members to arrange to attend every meeting by paying dues promptly. The Atlanta doctors will be happy for every member to attend this session and participate in all entertainments.

# Medical Association of Georgia

Next Annual Session, Atlanta, Ga., May 12, 13, 14, 15, 1931

## OFFICERS

President.....	G. Y. Moore, Cuthbert	Second Vice-President.....	S. T. R. Revell, Louisville
President-Elect.....	Arthur G. Fort, Atlanta	Secretary-Treasurer.....	Allen H. Bunce, Atlanta
First Vice-President.....	Geo. A. Traylor, Augusta	Parliamentarian.....	M. A. Clark, Macon

## DELEGATES TO THE A. M. A.

Wm. H. Myers (1931-2).....	Savannah	Alternate, C. W. Roberts.....	Atlanta
Alternate, Wm. A. Mulherin.....	Augusta	O. H. Weaver (1930-1).....	Macon
E. C. Thrash (1931-2).....	Atlanta	Alternate, C. K. Sharp.....	Arlington

## COUNCIL

M. M. Head, Chairman.....	Zebulon	C. L. Ayers, Clerk.....	Toccoa
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### Councilors

1. Wm. H. Myers (1933).....	Savannah
2. J. A. Redfearn (1933).....	Albany
3. J. C. Patterson (1933).....	Cuthbert
4. O. W. Roberts (1933).....	Carrollton
5. E. C. Thrash (1931).....	Atlanta
6. M. M. Head (1931).....	Zebulon
7. M. M. McCord (1931).....	Rome
8. H. M. Fullilove (1931).....	Athens
9. C. L. Ayers (1932).....	Toccoa
10. S. J. Lewis (1932).....	Augusta
11. A. S. M. Coleman (1932).....	Douglas
12. J. Cox Wall (1932).....	Eastman

### Vice-Councilors

1. C. Thompson (1933).....	Millen
2. R. F. Wheat (1933).....	Bainbridge
3. Chas. A. Greer (1933).....	Oglethorpe
4. W. H. Clark (1933).....	LaGrange
5. W. A. Selman (1931).....	Atlanta
6. K. S. Hunt (1931).....	Griffin
7. W. H. Perkinson (1931).....	Marietta
8. Paul L. Holliday (1931).....	Athens
9. J. K. Burns, Jr. (1932).....	Gainesville
10. H. D. Allen, Jr. (1932).....	Milledgeville
11. K. McCullough (1932).....	Waycross
12. J. W. Edmondson (1932).....	Dublin

## COMMITTEES

### Scientific Work

C. W. Roberts, Chairman.....	Atlanta
Sam P. Wise.....	Americus
A. H. Bunce, Secretary-Treasurer.....	Atlanta
G. Y. Moore, President.....	Cuthbert
A. G. Fort, Pres.-Elect.....	Atlanta

### Public Policy and Legislation

J. W. Palmer, Chairman (1932).....	Ailey
Dan Y. Sage (1931).....	Atlanta
A. R. Rozar (1933).....	Macon
V. H. Bassett (1931).....	Savannah
G. Y. Moore, President.....	Cuthbert
A. G. Fort, President-Elect.....	Atlanta
A. H. Bunce, Secretary-Treasurer.....	Atlanta
T. F. Abercrombie, Commissioner of Health, State of Georgia.....	Atlanta

### Medical Defense

M. A. Clark, Chairman (1933).....	Macon
Wm. A. Mulherin (1934).....	Augusta
E. C. Thrash (1931).....	Atlanta
M. M. Head, Chairman of Council.....	Zebulon
A. H. Bunce, Secretary-Treasurer.....	Atlanta
A. G. Fort, President-Elect.....	Atlanta

### Hospitals

C. S. Lentz, Chairman (1933).....	Augusta
Grady N. Coker, Secretary (1932).....	Canton
K. McCullough, (1934).....	Waycross
Geo. F. Klugh (1935).....	Atlanta
Julian K. Quattlebaum (1931).....	Savannah
A. G. Fort, President-Elect.....	Atlanta

### Abner Wellborn Calhoun Lectureship

J. E. Paullin, Chairman (1933).....	Atlanta
H. I. Reynolds (1934).....	Athens
Eugene E. Murphy (1935).....	Augusta
Craig Barrow (1931).....	Savannah
Frank K. Boland (1932).....	Atlanta
A. G. Fort, President-Elect.....	Atlanta

### Necrology

M. Hines Roberts, Chairman.....	Atlanta
C. K. Sharp.....	Arlington
H. M. Branham.....	Brunswick

### Medical History of Georgia

E. C. Thrash, Chairman.....	Atlanta
Frank K. Boland.....	Atlanta
M. A. Clark.....	Macon
G. Y. Moore, President.....	Cuthbert
A. G. Fort, President-Elect.....	Atlanta
A. H. Bunce, Secretary-Treasurer.....	Atlanta

### Crawford W. Long Memorial Prize

Wm. R. Dancy, Chairman.....	Savannah
Stewart R. Roberts.....	Atlanta
V. P. Sydenstricker.....	Augusta
George Bachmann.....	Atlanta
R. V. Lamar.....	Augusta

### Cancer Commission

J. L. Campbell, Chairman.....	Atlanta
G. H. Lang.....	Savannah
Chas. H. Watt.....	Thomasville
J. C. Patterson.....	Cuthbert
A. A. Barge.....	Newnan
H. G. Weaver.....	Macon
R. M. Harbin.....	Rome
Stewart D. Brown.....	Royston
M. B. Allen.....	Hoschton
W. J. Cranston.....	Augusta
J. W. Simmons.....	Brunswick
J. W. Edmondson.....	Dublin
E. L. Bishop.....	Atlanta

### Advisory Committee—Woman's Auxiliary

B. H. Minchew, Chairman.....	Waycross
Marion T. Benson.....	Atlanta
V. C. Daves.....	Vienna
Wm. R. Dancy.....	Savannah
Paul L. Holliday.....	Athens

### Fraternal Delegates to Other State Meetings

To Visit Alabama: J. Cox Wall, Eastman; Jas. A. Fountain, Macon.
To Visit Florida: Gordon Chason, Bainbridge; W. F. Reavis, Waycross.
To Visit North Carolina: R. L. Miller, Waynesboro; S. A. Boland, Thomson.
To Visit South Carolina: Stewart R. Roberts, Atlanta; A. G. Fort, Atlanta.
To Visit Tennessee: M. M. McCord, Rome; Joe P. Bowdoin, Adairsville.



# Directory of the Medical Association of Georgia for 1930

Names of all members and officers are published as corrected by Secretaries of county societies.

## BALDWIN COUNTY

### Officers

President ..... Mobley, John W., Jr.  
Vice-President ..... Cox, C. G.  
Sec'y.-Treas. .... Wiley, John D.  
Delegate ..... Bowen, U. S.  
Alternate Delegate ..... Scott, W. M.

### Members

Allen, E. W., Milledgeville  
Allen, H. D., Jr., Milledgeville  
Binion, Richard, Milledgeville  
Bostwick, W. A., Milledgeville  
Bowen, U. S., Milledgeville  
Bradford, R. W., Milledgeville  
Cox, C. G., Milledgeville  
Echols, Geo. L., Milledgeville  
Garrard, J. I., Milledgeville  
Hall, T. M., Milledgeville  
Langston, M. F. Milledgeville (Hon.)  
Longino, L. P., Milledgeville  
Mobley, J. W., Jr., Pelham  
Mobley, J. W., Sr., Milledgeville  
Rankin, D. T., Milledgeville  
Scott, W. M., Milledgeville  
Schwoil, E. W., Milledgeville  
Swint, R. C., Milledgeville  
Walker, N. P., Milledgeville  
Wheeler, G. A., Milledgeville, (Hon.)  
Wiley, John D., Milledgeville  
Yarbrough, Y. H., Milledgeville  
Youmans, C. R., Milledgeville

## BARROW COUNTY

### Officers

President ..... Almand, C. B.  
Vice-President ..... Cross, R. C.  
Sec'y.-Treas. .... Mathews, W. L.  
Delegate ..... Harris, E. R.  
Alternate Delegate ..... Adams, R. P.

### Members

Adams, R. P., Bethlehem  
Almand, C. B., Winder  
Bowdoin, W. H., Statham  
Cross, R. C., Dawson Springs, Ky.  
Harris, E. R., Winder  
Mathews, W. L., Winder  
Pharr, L. P., Auburn  
Randolph, W. T., Winder  
Ross, S. T., Winder  
Tramel, J. R., Statham

## BARTOW COUNTY

### Officers

President ..... Horton, A. L.  
Vice-President ..... Howell, S. M.  
Sec'y.-Treas. .... Shamblin, A. C.  
Delegate ..... Lowry, T.  
Alternate Delegate ..... Pearson, H. C.

### Members

Adair, R. E., Cartersville  
Bowdoin, J. P., Adairsville

Bradford, H. B., Pine Log  
Burton, R. E., Kingston  
Ellis, Chas. L., Kingston  
Griffin, W. C., Cartersville  
Horton, A. L., Taylorsville  
Howell, S. M., Cartersville  
Lowry, T., Cartersville  
Pearson, H. C., Pensacola, Fla.  
Shamblin, A. C., Cartersville  
Wofford, W. E., Cartersville

## BEN HILL SOCIETY

### Officers

President ..... Willis, G. W.  
Vice-President ..... Harper, A.  
Sec'y.-Treas. .... Osborne, L. S.  
Delegate ..... Ware, D. B.

### Members

Coffee, W. P., Fitzgerald  
Dorminy, E. J., Fitzgerald  
Dorminy, W. D., Fitzgerald  
Frazer, J. L., Fitzgerald  
Harper, A., Wray  
McElroy, John, Fitzgerald  
McElroy, S. L., Ocilla  
Osborne, L. S., Fitzgerald (Hon.)  
Russell, Ralph E., Fitzgerald  
Ward, Frank, Fitzgerald  
Ware, D. B., Fitzgerald  
Ware, R. M., Fitzgerald  
Wilcox, C. H., Fitzgerald  
Willis, G. W., Ocilla

## BIBB COUNTY

### Officers

President ..... Applewhite, J. D.  
Vice-President ..... Adams, J. F.  
Sec'y.-Treas. .... Goolsby, R. C., Jr.  
Delegate ..... Bazemore, Wallace  
Delcgate ..... Webb, F. L.

### Members

Adams, I. H., Georgia Casualty Bldg., Macon  
Adams, J. F., 700 Spring St., Macon  
Anderson, C. L., Macon Nat'l. Bank Bldg., Macon  
Anderson, J. C., Georgia Casualty Bldg., Macon  
Applewhite, J. D., Health Department, Macon  
Atkinson, H. C., 700 Spring St., Macon  
Barrow, H. L., 2515 Second St., Macon  
Bashinski, Benj., 700 Spring St., Macon  
Bazemore, W. L., Macon Nat'l. Bank Bldg., Macon  
Brown, J. F., Middle Georgia Sanitarium, Macon  
Cater, R. L., Jr., 451 Cherry St., Macon  
Chrisman, W. W., 700 Spring St., Macon  
Clark, M. A., Georgia Casualty Bldg., Macon

Clay, J. E., The Clinic, Macon  
Coleman, Y. R., 518 Oglethorpe St., Macon  
Corn, Ernest, 700 Spring St., Macon  
Daniel, Orman, Citizens & Southern Bank Bldg., Macon  
Derry, H. P., 664 College St., Macon  
Dove, W. B., 135 Boulevard Ave., Macon  
DuPree, G. W., Gordon  
Fountain, J. A., Oglethorpe Infirmary, Macon  
Garrard, J. A., Roberta  
Golsan, W. R., 794 Courtland Ave., Macon  
Goolsby, R. Cullen, Jr., 700 Spring St., Macon  
Greene, B. W., Bibb Bldg., Macon  
Hall, J. I., Georgia Casualty Bldg., Macon  
Hall, T. H., 617 Mulberry St., Macon  
Harrington, F. Y., Georgia Casualty Bldg., Macon  
Harrold, Chas. C., 700 Spring St., Macon  
Harrold, Thomas, 700 Spring St., Macon  
Hembree, J. A., Bibb Bldg., Macon  
Henderson, D. T., The Clinic, Macon  
Hinton, Chas. C., 700 Spring St., Macon  
Holmes, J. P., 700 Spring St., Macon  
Hurley, T. A., The Clinic, Macon  
Johnson, Geo. L., U. S. Veterans' Hospital, Muskogee, Okla.  
Johnson, J. E. L., Roberta  
Kay, J. B., Byron  
Keen, O. F., Oglethorpe Infirmary, Macon  
Keiser, Jno. M., Bibb Bldg., Macon  
Kemp, A. P., The Clinic, Macon  
King, J. L., Grand Bldg., Macon  
Martin, J. W., Bibb Bldg., Macon  
Massenburg, G. Y., The Clinic, Macon  
McAfee, J. C., Georgia Casualty Bldg., Macon  
McAfee, L. C., Bibb Bldg., Macon  
McMichael, V. H., Macon Nat'l. Bank Bldg., Macon  
Meriwether, W. W., Georgia Casualty Bldg., Macon  
Miller, G. T., Citizens & Southern Bank Bldg., Macon  
Mobley, W. E., 700 Spring St., Macon  
Moses, Harry, Ga. Life Bldg., Macon  
Newman, W. A., 700 Spring St., Macon  
Newton, R. G., Georgia Casualty Bldg., Macon  
Palmer, S. B., Macon Nat'l. Bank Bldg., Macon  
Pennington, C. L., 700 Spring St., Macon  
Pierce, Lovick W., 700 Spring St., Macon  
Porch, Leon D., 1403 Oglethorpe St., Macon

Pumpelly, Wm. C., Georgia Casualty Bldg., Macon  
 Rawls, Lewis L., Georgia Casualty Bldg., Macon  
 Respass, H., Grand Bldg., Macon  
 Richardson, C. H., Jr., 700 Spring St., Macon  
 Richardson, R. W., Macon Hospital, Macon  
 Ridley, C. L., Bankers Health & Life Bldg., Macon  
 Rogers, T. E., 700 Spring St., Macon  
 Ross, J. T., Citizens & Southern Bank Bldg., Macon  
 Rozar, A. R., Oglethorpe Infirmary, Macon  
 Rubins, S. N., Bibb Bldg., Macon  
 Selden, J. A., Macon Savings Bank Bldg., Macon  
 Sigman, J. M., Georgia Casualty Bldg., Macon  
 Stapler, M. M., Bibb Bldg., Macon  
 Thompson, O. R., 700 Spring St., Macon  
 Walker, C. H., 617 Mulberry St., Macon  
 Walker, D. D., 700 Spring St., Macon  
 Ward, J. B., Georgia Casualty Bldg., Macon  
 Wasden, C. N., Ga. Casualty Bldg., Macon  
 Weaver, H. G., 700 Spring St., Macon  
 Weaver, O. H., 700 Spring St., Macon  
 Webb, F. L., Bibb Bldg., Macon  
 White, W. S., Fort Valley  
 Williams, W. A., Georgia Casualty Bldg., Macon  
 Winship, Herring, 403 Cherry St., Macon  
 Wright, J. E., 324 College St., Macon

**BLUE RIDGE SOCIETY****Officers**

President ..... Daves, J. M.  
 Vice-President ..... Prince, E. L.  
 Sec'y.-Treas. .... Crawford, C. B.  
 Delegate ..... Crawford, C. B.

**Members**

Crawford, C. B., Blue Ridge  
 Daves, J. M., Blue Ridge  
 Goss, N. C., Ellijay  
 Prince, E. L., Morganton  
 Rogers, W. H., Young Cane

**BROOKS COUNTY****Officers**

President ..... Jelks, E. L.  
 Sec'y.-Treas. .... McClure, R. E.

**Members**

Clower, R. J., Morven  
 Jelks, E. L., Quitman  
 Jones, A. B., Jr., Quitman  
 Moye, T. R., Quitman  
 McClure, R. E., Quitman  
 McMichael, J. R., Quitman  
 Smith, L. A., Quitman

**BULLOCH-CHANDLER-EVANS COUNTIES****Officers**

President ..... Kennedy, W. D.  
 Vice-President ..... Woods, W. D.  
 Sec'y.-Treas. .... Simmons, W. E.  
 Delegate ..... Kennedy, R. L.  
 Alternate Delegate ..... Simmons, W. E.

**Members**

Clanton, D. S., Hagan  
 Cone, R. L., Statesboro  
 Daniel, B. E., Claxton

Daniel, J. W., Claxton  
 Deal, B. A., Statesboro  
 Elarbee, G. W., Daisy  
 Ellis, S. T., Claxton  
 Floyd, W. E., Statesboro  
 Jones, B. B., Metter  
 Kennedy, R. L., Metter  
 Kennedy, W. D., Metter  
 Mooney, A. J., Statesboro  
 McElveen, J. M., Brooklet  
 Nevil, J. L., Metter  
 Olliff, H. H., Register  
 Patrick, J. Z., Pulaski  
 Simmons, W. E., Metter  
 Stapleton, C. E., Groveland  
 Watkins, E. C., Brooklet  
 Woods, W. D., Portal

**BURKE COUNTY****Officers**

President ..... Cook, J. M.  
 Vice-President ..... Lewis, J. B.  
 Sec'y.-Treas. .... Hillis, W. W.  
 Delegate ..... Bent, H. F.  
 Alternate Delegate ..... Byne, J. M., Sr.

**Members**

Bent, H. F., Midville  
 Byne, J. M., Jr., Waynesboro  
 Byne, J. M., Sr., Waynesboro  
 Cook, J. M., Sardis  
 Fulcher, M. O., Waynesboro  
 Hillis, W. W., Sardis  
 Lewis, J. B., Waynesboro  
 Lowe, Wm. R., Midville  
 Macauley, H. A., Waynesboro  
 McCarver, W. C., Vidette  
 Miller, Robt. L., Waynesboro  
 Morton, H. J., Waynesboro  
 Smith, B. H., Keysville  
 Sutton, W. H., Midville

**BUTTS COUNTY****Officers**

President ..... White, A. F.  
 Vice-President ..... Howell, O. B.  
 Sec'y.-Treas. .... Hammond, Robt. L.  
 Delegate ..... White, A. F.

**Members**

Akin, B. F., Jenkinsburg  
 Hammond, Robt. L., Jackson  
 Howell, O. B., Jackson  
 White, A. F., Flovilla

**CAMPBELL COUNTY****Officers**

President ..... Camp, W. R.  
 Vice-President ..... Bullard, T. P.  
 Sec'y.-Treas. .... Green, A. J.  
 Delegate ..... Camp, R. T.

**Members**

Bullard, T. P., Palmetto  
 Camp, R. T., Fairburn  
 Camp, W. R., Fairburn  
 Green, A. J., Union City

**CARROLL COUNTY****Officers**

President ..... Wilson, L. E.  
 Sec'y.-Treas. .... Goodwyn, H. J.

**Members**

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**Members**

Anderson, J. W., Gray (Hon.)  
 Waits, W. J., Flovilla  
 Zachary, J. D., Gray

**LAMAR COUNTY****Officers**

President ..... Willis, C. H.  
 Vice-President ..... Suggs, C. E.  
 Sec'y.-Treas. .... Rogers, J. M.  
 Delegate ..... Corry, J. A.

**Members**

Barron, J. M. F., Milner, R. F. D.  
 Corry, J. A., Barnesville  
 Rogers, J. M., Barnesville  
 Suggs, C. E., Barnesville  
 Willis, C. H., Barnesville

**LAURENS COUNTY****Officers**

President ..... Barton, J. J.  
 Vice-President ..... Hodges, C. A.  
 Sec'y.-Treas. .... Cheek, O. H.  
 Delegate ..... New, J. E.  
 Alternate Delegate ..... Edmondson, J. W.

**Members**

Barton, J. J., Dublin  
 Benson, R. S., Alamo, R. 1  
 Cheek, O. H., Dublin  
 Claxton, E. B., Dublin  
 Coleman, A. T., Dublin  
 Edmondson, J. W., Dublin  
 Hodges, C. A., Dublin  
 Kea, T. B., Adrian  
 Maloy, Jim W., Rhine

Montford, H. L., Dublin  
 New, J. E., Dexter  
 Thompson, W. C., Dublin  
 Walker, Sidney, Dublin  
 Woodward, D. D., Dudley

**LOWNDES COUNTY****Officers**

President ..... Crozier, G. T.  
 Vice-President ..... Smith, E. J.  
 Sec'y.-Treas. .... Owens, B. G.  
 Delegate ..... Saunders, A. F.  
 Alternate Delegate ..... Williams, T. C.

**Members**

Bird, Frank, Valdosta  
 Burns, D. L., Valdosta  
 Crozier, G. T., Valdosta  
 Elder, E. B., Knoxville Gen'l Hospital,  
 Knoxville, Tenn.  
 Farmer, L. P., Fargo  
 Giddens, C. C., Valdosta  
 Griffin, A., Valdosta  
 Little, A. G., Valdosta  
 McNeal, F. F., Hahira  
 Meadows, C. B., Valdosta  
 Mixson, J. F., Valdosta  
 Owens, B. G., Valdosta  
 Pennington, J. W., Howell  
 Prescott, J. P., Lake Park  
 Quarterman, P. C., Valdosta  
 Quillian, E. P., Clyattville  
 Saunders, A. F., Valdosta  
 Smith, E. J., Hahira  
 Smith, J. M., Valdosta  
 Smith, Lewis, Lakeland  
 Smith, T. H., Valdosta  
 Talbot, T. M., Valdosta (Hon.)  
 Thomas, F. H., Valdosta  
 Thomas, Jos. A., Valdosta  
 Thomas, Jos. A., Valdosta  
 Thompson, E. F., Valdosta  
 Williams, T. C., Valdosta

**MACON COUNTY****Officers**

President ..... Nelson, G. W.  
 Vice-President ..... Savage, C. P.  
 Sec'y.-Treas. .... Derrick, H. C.  
 Delegate ..... Frederick, D. B.

**Members**

Childs, J. N., Ideal (Hon.)  
 Derrick, H. C., Oglethorpe  
 Frederick, D. B., Marshallville  
 Greer, Chas. A., Oglethorpe  
 Lightner, L. L., Ideal  
 Mullino, F. M., Montezuma  
 Nelson, G. W., Marshallville  
 Richardson, C. H., Sr., Montezuma  
 (Hon.)  
 Savage, C. P., Montezuma

**MADISON COUNTY****Officers**

President ..... Bryant, C. H.  
 Vice-President ..... Kelley, G. W.  
 Sec'y.-Treas. .... Gholston, W. D.  
 Delegate ..... Banister, H. G.

**Members**

Banister, H. G., Ila  
 Bryant, C. H., Comer  
 Gholston, W. D., Danielsville  
 Kelley, Geo. W., Carlton  
 Whelchel, C. C., Comer (Deceased)  
 Westbrook, R. J., Ila



**MERIWETHER COUNTY****Officers**

Sec'y.-Treas. .... Gilbert, R. B.

**Members**

Allen, W. P., Woodbury  
Bennett, V. H., Gay  
Dixon, J. L., Woodbury  
Ellis, W. P., Chipley  
Gilbert, R. B., Greenville  
Johnson, J. A., Manchester

**MITCHELL COUNTY****Officers**

President ..... Roles, C. L.  
Vice-President ..... Williams, B.  
Sec'y.-Treas. .... Stevenson, C. A.

**Members**

Belcher, D. P., Pelham  
Clements, J. R., Pelham  
Cranford, O. G., Pelham  
Lewis, F. L., Camilla  
Reid, C. W., Pelham  
Roles, C. L., Camilla  
Stevens, A. T., Sale City  
Stevenson, C. A., Camilla  
Summerlin, J. A., Pelham (Deceased)  
Williams, B., Pelham

**MONROE COUNTY****Officers**

President ..... Alexander, G. H.  
Vice-President ..... Goolsby, R. C.  
Sec'y.-Treas. .... Elrod, J. O.  
Delegate ..... Smith, W. J.  
Alternate Delegate ..... Smith, B. L.

**Members**

Alexander, G. H., Forsyth  
Elrod, J. O., Forsyth  
Goolsby, R. C., Sr., Forsyth  
Smith, B. L., Forsyth, R. 1  
Smith, W. J., Juliette

**MONTGOMERY COUNTY****Officers**

President ..... Moses, W. M.  
Vice-President ..... Sharpe, H. C.  
Sec'y.-Treas. .... Hunt, J. E.  
Delegate ..... Dees, J. H.

**Members**

Dees, J. H., Alston  
Hunt, J. E., Mt. Vernon  
Moses, W. M., Uvalda  
Palmer, J. W., Ailey  
Sharpe, H. C., Alston

**MORGAN COUNTY****Officers**

President ..... Carter, D. M.  
Vice-President ..... Fambrough, W. M.  
Sec'y.-Treas. .... McGeary, W. C.  
Delegate ..... Porter, J. L.

**Members**

Carter, D. M., Madison  
Fambrough, W. M., Bostwick  
McGeary, W. C., Madison  
Porter, J. L., Rutledge

**MUSCOGEE COUNTY****Officers**

President ..... Dexter, C. A.  
Vice-President ..... Blackmar, F. B.  
Sec'y.-Treas. .... Bickerstaff, H. J.

**Members**

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Baird, J. M., Doctors Bldg., Columbus

Bickerstaff, H. J., 1301 Broadway, Columbus  
Blackmar, Francis B., Woolworth Bldg., Columbus

Blanchard, Mercer, Swift Bldg., Columbus

Brannen, O. C., Murrah Bldg., Columbus  
Brooks, H. W., 208 Thirteenth St., Columbus

Brooks, R. L., Girard, Ala., R. 1

Bush, John, Doctors Bldg., Columbus

Carter, C. B., Murrah Bldg., Columbus

Cooke, W. L., Doctors Bldg., Columbus

Dexter, C. A., Murrah Bldg., Columbus

Dillard, Guy J., Murrah Bldg., Columbus

Dykes, A. N., Swift Bldg., Columbus

Gilliam, O. D., Doctors Bldg., Columbus

Jenkins, W. F., City Hospital, Columbus

Johnson, C. D., Murrah Bldg., Columbus

Johnson, J. H., Murrah Bldg., Columbus

Johnson, R. F., Swift Bldg., Columbus

McDuffie, J. H., Jr., Masonic Temple, Columbus

McDuffie, J. H., Sr., Masonic Temple, Columbus

Moses, Alice, P. O. Box 863, Columbus

Murray, G. S., Swift Bldg., Columbus

Norman, Frank P., Murrah Bldg., Columbus

Peacock, C. A., Murrah Bldg., Columbus

Schley, Francis B., Swift Bldg., Columbus

Thompson, J. B., Swift Bldg., Columbus

Tillery, Bert, 1301 Broadway, Columbus

Willis, J. N., Swift Bldg., Columbus

Winn, J. H., Swift Bldg., Columbus

Woodbridge, J. C., Murrah Bldg., Columbus

Youmans, J. R., 1140½ Broad St., Columbus

Young, S. E., Midland

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Boland, S. A., Thomson

**NEWTON COUNTY****Officer**

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**Members**

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Randle, J. H., Covington, R. 8 (Deceased)

Sams, J. R., Covington, R. 8

Travis, W. D., Covington

Waites, S. L., Covington

**OCMULGEE SOCIETY**

(Bleckley, Dodge, Pulaski)

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Vice-President ..... Yawn, B. W.

Sec'y.-Treas. .... Bush, A. R.

Delegate ..... Smith, J. M.

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Bush, Albert R., Hawkinsville

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Massey, W. F., Chester

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Parramore, W. V., Cochran

Smith, Ernest L., Eastman

Smith, J. M., Cochran

Wall, J. C., Eastman

Whipple, R. L., Cochran  
Yawn, B. W., Eastman

**POLK COUNTY****Officers**

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Vice-President ..... Cooper, J. J.

Sec'y.-Treas. .... Chaudron, P. O.

Delegate ..... Chaudron, P. O.

Alternate Delegate ..... Williams, C. W.

**Members**

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Chaudron, P. O., Cedartown

Cooper, J. J., Cedartown

England, W. G., Cedartown

Good, Jno. W., Cedartown

McBryde, T. E., Rockmart

Peek, C. W., Cedartown

Pennington, J. E., Esom Hill

Whitely, S. L., Cedartown

Williams, C. W., Cedartown

Wood, C. V., Cedartown

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Vice-President ..... Clodfelter, T. C.

Sec'y.-Treas. .... Griffith, E. F.

**Members**

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Sec'y.-Treas. .... Green, J. A.

**Members**

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Green, J. A., Clayton

Neville, L., Dillard

**RANDOLPH COUNTY****Officers**

President ..... Martin, F. M.

Vice-President ..... Harper, T. F.

Sec'y.-Treas. .... Moore, G. Y.

Delegate ..... McCurdy, E. C.

Alternate Delegate ..... Rogers, F. S.

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Binion, W. W., Benevolence

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Crook, W. W., Cuthbert

Elliott, W. G., Cuthbert

Gary, Loren, Georgetown

Harper, T. F., Coleman

Ingram, H. R., Coleman

Martin, F. M., Shellman

Moore, G. Y., Cuthbert

McCurdy, E. C., Shellman

Patterson, F. D., Jr., Auburn, Ala.

(Hon.)

Patterson, F. D., Cuthbert (Hon.)

Patterson, J. C., Cuthbert

Rogers, F. S., Coleman

Saurez, Annette McD., Cuthbert (Hon.)

Saxon, T. S., Shellman (Hon.)

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Shepard, J. L., Carnegie

Smith, D. L., Cuthbert (Hon.)

Staples, J. H., Cuthbert (Hon.)

Taylor, H. W., Cuthbert (Hon.)

Terry, Wm. R., Shellman (Hon.)

Wade, C. E., Cuthbert (Hon.)

Wade, W. J., Cuthbert (Hon.)  
(Deceased)  
Wimberly, William, Ft. Gaines (Hon.)  
Weathers, A. F., Shellman

**RICHMOND COUNTY****Officers**

President.....Traylor, George A.  
Vice-President.....Pund, Edgar R.  
Sec'y.-Treas.....Harrell, H. P.  
Delegate.....Holmes, L. P.  
Alternate Delegate.....Houston, W. R.

**Members**

Agee, M. P., 753 Broad St., Augusta  
Akerman, J. C., 831 Fifteenth St., Augusta  
Bailey, L. A., Milledgeville  
Battey, Colden R., Southern Finance Bldg., Augusta  
Battey, W. W., Jr., 428 Sixth St., Augusta  
Bedingfield, W. R., Southern Finance Bldg., Augusta  
Bernard, G. T., 203 Thirteenth St., Augusta  
Blanchard, C. A., 925 Broad St., Augusta  
Blanchard, H. H., Gracewood  
Blanchard, P. G., Appling  
Brittingham, John W., Southern Finance Bldg., Augusta  
Brown, T. P., Marion Bldg., Augusta  
Bryans, C. I., Lamar Bldg., Augusta  
Bryson, R. I., Southern Finance Bldg., Augusta  
Burdashaw, J. F., 724 Monte Sano Ave., Augusta  
Burpee, C. M., University Hospital, Augusta  
Butler, J. H., Southern Finance Bldg., Augusta  
Chaney, Ralph H., Medical College, Augusta  
Clayton, Malcolm D., 811 Metcalf St., Augusta  
Crane, C. W., 1345 Greene St., Augusta  
Cranston, W. J., Southern Finance Bldg., Augusta  
Davidson, A. A., 1116 Greene St., Augusta  
Eve, H. J., 619 Greene St., Augusta  
Gibson, C., Thomson  
Goodrich, W. H., Southern Finance Bldg., Augusta  
Gray, J. D., 1345 Greene St., Augusta  
Harison, Wm. H., Jr., 122 Jackson St., Augusta  
Harrell, H. P., Southern Finance Bldg., Augusta  
Harris, R. L., U. S. Veterans' Hospital, Augusta  
Holmes, L. P., Southern Finance Bldg., Augusta  
Horne, G. T., Southern Finance Bldg., Augusta  
Houston, W. R., Margaret Wright Hospital, Augusta  
Hull, Asbury, Southern Finance Bldg., Augusta  
Hull, J. M., 753 Broad St., Augusta  
Josey, J. C., Mary Black Clinic and Hospital, Spartanburg, S. C.  
Kellogg, W. C., Southern Finance Bldg., Augusta  
Kelly, G. Lombard, Medical College, Augusta

Kershaw, Theo., Southern Finance Bldg., Augusta  
Kilpatrick, A. J., 407 Seventh St., Augusta  
Lamar, R. V., Medical College, Augusta  
Lee, F. Lansing, Southern Finance Bldg., Augusta  
Lentz, C. S., University Hospital, Augusta  
Levy, M. S., Southern Finance Bldg., Augusta  
Lewis, S. J., Southern Finance Bldg., Augusta  
Lichtenstein, Samuel, Medical College, Augusta  
May, E. R., Lincolnton  
Mealing, H. G., Martintown Road, R. F. D., Augusta  
Milligan, K. W., 942 Greene St., Augusta  
Mountain, G. W., 2612 Walton Way, Augusta  
Mulherin, F. X., Southern Finance Bldg., Augusta  
Mulherin, W. A., Southern Finance Bldg., Augusta  
Murphey, E. E., 432 Telfair St., Augusta  
Oden, Jno. W., Gracewood  
Oertel, T. E., Southern Finance Bldg., Augusta  
Oliphant, Jones B., Mitchell  
Page, Hugh N., Southern Finance Bldg., Augusta  
Philpot, W. K., Lamar Bldg., Augusta  
Phinizy, Irvine, Southern Finance Bldg., Augusta  
Price, W. T., Montgomery Bldg., Augusta  
Pund, Edgar R., Medical College, Augusta  
Rhodes, R. L., Southern Finance Bldg., Augusta  
Roberts, W. H., 828 Greene St., Augusta  
Robertson, J. Righton, 753 Broad St., Augusta  
Roule, J. Victor, Medical College, Augusta  
Scharnitzky, E. O., Southern Finance Bldg., Augusta  
Schwartz, E. W., Medical College, Augusta  
Shaw, E. W., Southern Finance Bldg., Augusta  
Sherman, Jno. H., 1122 Johns Road, Augusta  
Silver, D. M., Southern Finance Bldg., Augusta  
Sydenstricker, V. P., University Hospital, Augusta  
Tessier, L. P., Masonic Temple, Augusta  
Thurmond, J. W., 407 Seventh St., Augusta  
Timmons, C. C., Marion Bldg., Augusta  
Todd, L. N., Valley Station, Ky.  
Tousignant, C., St. Mary's Gen'l Hospital, Lewiston, Maine  
Traylor, Geo. A., Southern Finance Bldg., Augusta  
Wade, A. C., Marion Bldg., Augusta  
Ward, Chas. D., Southern Finance Bldg., Augusta  
Weeks, J. L., Harlem  
Weeks, R. B., Southern Finance Bldg., Augusta  
Wilcox, E. A., Southern Finance Bldg., Augusta

Wright, Geo. W., Southern Finance Bldg., Augusta  
Wright, J. C., Southern Finance Bldg., Augusta  
Wright, Lewis H., Anesthetic Department, E. R. Squibb & Sons, 745 Fifth Ave., New York City  
Wright, P. B., Lamar Bldg., Augusta

**SCREVEN COUNTY****Officers**

President.....Doster, H. W.  
Vice-President.....Reddick, A. B.  
Sec'y.-Treas.....Lanier, L. F.  
Delegate.....Cail, J. C.  
Alternate Delegate.....Reddick, A. B.

**Members**

Cail, John C., Sylvania  
Doster, H. W., Rocky Ford  
Downing, E. E., Newington  
Ezell, H. E., Oliver  
Joyner, A. S., Woodcliff  
Lanier, L. F., Sylvania  
Lovett, W. R., Sylvania  
Mims, S. W., Sylvania  
Reddick, A. B., Sylvania  
Rushing, W. E., Millhaven

**SPALDING COUNTY****Officers**

President.....Austin, W. H.  
Vice-President.....Huckaby, A. H.  
Sec'y.-Treas.....Copeland, H. J.  
Delegate.....Frye, A. H.  
Alternate Delegate.....Hunt, K. S.

**Members**

Anthony, E. R., Sr., Griffin (Hon.)  
Anthony, J. R., Griffin  
Austin, W. H., Griffin  
Copeland, H. J., Griffin  
Copeland, H. W., Griffin  
Drewry, T. E., Griffin (Hon.)  
English, R. E. L., Experiment  
Forrer, D. A., Griffin  
Frye, A. H., Griffin  
Graves, J. R., Zebulon  
Griffith, C. F., Griffin  
Grubbs, J. H., Molena  
Hawkins, T. I., Griffin  
Head, D. L., Zebulon  
Head, J. M., Zebulon (Hon.) (Deceased)  
Head, M. M., Zebulon  
Howard, I. B., Williamson  
Huckaby, A. H., Griffin  
Humphries, W. C., Griffin  
Hunt, K. S., Griffin  
Mallory, R. A., Concord  
Miles, W. C., Griffin  
Steele, W. H., Griffin  
Tucker, C. L., Griffin

**STEPHENS COUNTY****Officers**

President.....Swain, W. H.  
Vice-President.....Terrell, J. H.  
Sec'y.-Treas.....Ayers, C. L.  
Delegate.....Terrell, J. H.

**Members**

Ayers, C. L., Toccoa  
Chaffin, E. F., Toccoa  
Craig, Alexander, Toccoa

Davis, Jeff, Toccoa  
 Edge, J. H., Toccoa (Hon.)  
 Heller, W. B., Toccoa  
 Isbell, J. E. D., Toccoa  
 Swain, W. H., Martin  
 Terrell, J. H., Toccoa

**STEWART-WEBSTER COUNTIES****Officers**

President.....McCurdy, W. F.  
 Vice-President.....Lynch, C. S.  
 Sec'y.-Treas.....Kenyon, J. M.  
 Delegate.....Pickett, C. E.

**Members**

Alston, N. C., Richland (Hon.)  
 Grier, R. L., Lumpkin  
 Kenyon, J. M., Richland  
 Lunsford, J. F., Preston  
 Lynch, C. S., Lumpkin  
 McCurdy, W. F., Richland (Hon.)  
 Miller, T. B., Richland (Hon.)  
 Pickett, C. E., Richland  
 Sims, W. C., Richland  
 Tatum, W. J., Richland  
 Wimberly, J. S., Lumpkin (Hon.)

**SUMTER COUNTY****Officers**

President.....Chambliss, J. W.  
 Vice-President.....Logan, J. C.  
 Sec'y.-Treas.....Primrose, A. C.  
 Delegate.....Lunsford, J. F.  
 Alternate Delegate Smith, Herschel A.

**Members**

Anderson, E. B., Americus  
 Bagley, George W., Jr., DeSoto (Hon.)  
 Bridges, B. L., Ellaville  
 Cain, Sylvester, Greer, S. C.  
 Cato, F. L., DeSoto (Hon.)  
 Chambliss, J. W., Americus  
 Jordan, J. R., Ellaville  
 Lavender, J. R., Plains  
 Logan, J. C., Plains  
 Logan, Joe, Plains, R. F. D. (Hon.)  
 Lunsford, J. F., Preston (Hon.)  
 McMath, J. F., Americus  
 Pendergrass, Robt. C., Americus  
 Prather, W. S., Americus  
 Primrose, A. C., Americus  
 Riley, W. M., Martin, Ky.  
 Smith, Herschel A., Americus  
 Smith, William J., DeSoto (Deceased)  
 Stukes, J. T., Americus  
 Tolleson, H. M., Hahira  
 Ware, Ford, Americus  
 Wise, B. J., Plains  
 Wise, B. T., Americus  
 Wise, S. P., Americus  
 Wood, Kenneth, Leslie

**TALBOT COUNTY****Officers**

President.....Peeler, J. E.  
 Vice-President.....Leonard, W. P.  
 Sec'y.-Treas.....Carson, C. C.

**Members**

Carson, C. C., Talbotton  
 Leonard, W. P., Talbotton  
 Peeler, J. E., Woodland

**TALIAFERRO COUNTY****Officers**

President.....Rhodes, John A.  
 Sec'y.-Treas.....Nash, T. C.  
 Delegate.....Ray, A. T.  
 Alternate Delegate.....Davidson, A. C.

**Members**

Davidson, A. C., Sharon (Hon.)  
 Nash, T. C., Philomath  
 Ray, A. T., Sharon  
 Rhodes, John A., Crawfordville

**TATTNALL COUNTY****Officer**

Sec'y.-Treas.....Hughes, J. M.

**Members**

Hughes, J. M., Glennville  
 Jones, R. D., Elza  
 Kennedy, J. J., Collins  
 Strickland, L. V., Cobtown  
 Tootle, G. W., Glennville  
 Walling, C. B., Collins

**TAYLOR COUNTY****Officers**

President.....Edwards, W. W.  
 Vice-President.....Bryan, S. H.  
 Sec'y.-Treas.....Montgomery, R. C.  
 Delegate.....Montgomery, R. C.

**Members**

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 Edwards, W. W., Butler  
 Hind, J. C., U. S. Veteran's  
     Bureau, 1712 17th St., N. W.,  
     Washington, D. C. (Hon.)  
 Montgomery, R. C., Butler

**TELFAIR COUNTY****Officers**

President.....Powell, W. H.  
 Vice-President.....Born, W. H.  
 Delegate.....Mann, Frank

**Members**

Born, W. H., McRae  
 Fussell, J. K., Rhine, R. F. D.  
 Fussell, T. D., Rhine, R. F. D.  
 Harrell, A. O., Milan  
 Jones, A. J., Jacksonville  
 Kennon, B. M., McRae (Hon.)  
 Maloy, D. W. F., Milan  
 Mann, Frank R., McRae  
 Napier, LeRoy, Lumber City (Hon.)  
     (Deceased)  
 Neal, J. W., Scotland  
 Powell, W. H., Lumber City

**TERRELL COUNTY****Officers**

Sec'y.-Treas.....Thomas, Logan L.  
 Delegate.....Arnold, J. T.  
 Alternate Delegate.....Dean, J. G.

**Members**

Arnold, J. T., Parrott  
 Bowman, R. E., Bronwood  
 Chappell, Guy, Dawson  
 Cranford, J. R., Sasser  
 Dean, J. G., Dawson  
 Durham, Wm. P., Sasser  
 Holt, R. R., Parrott  
 Kenyon, S. P., Dawson  
 Lamar Lucius, Dawson  
 Lewis, J. H., Dawson  
 Patterson, J. W., Dawson  
 Thomas, Logan L., Dawson

**THOMAS COUNTY****Officers**

Sec'y.-Treas.....Little, A. D.

Delegate.....Wall, C. K.  
 Alternate Delegate.....Moore, H. M.

**Members**

Ainsworth, Harry, Thomasville  
 Andrews, Agnew, 341-353 West 50th St.,  
     New York City.  
 Austin, G. L., Pavo  
 Bell, R. F., Boston  
 Bevans, J. L., Thomasville (Hon.)  
 Brinson, J. B., Monticello, Fla. (Hon.)  
 Cheshire, S. L., Thomasville  
 Erickson, Mary J., Thomasville  
 Ferguson, C. H., Thomasville  
 Garrett, J. A., Meigs  
 Glover, G. B., Monticello, Fla., (Hon.)  
 Hill, Roy A., Thomasville  
 Isler, J. N., Meigs  
 Jarrell, W. W., Thomasville  
 Jenkins, H. B., Thomasville  
 Jones, H., Coolidge (Hon.)  
 King, J. M., Metcalf  
 King, J. T., Thomasville  
 Little, A. D., Thomasville  
 Lundy, L. L., Boston  
 Moore, H. M., Thomasville  
 Palmer, J. B., Thomasville  
 Palmer, J. I., Thomasville  
 Reid, James W., Thomasville  
 Reilley, C. J., Thomasville  
 Sanchez, S. E., Barwick  
 Vann, H. A., Boston (Hon.)  
 Wahl, Ernest, Thomasville  
 Wall, C. K., Thomasville  
 Watkins, W. B., Metcalf  
 Watt, C. H., Thomasville  
 Williams, J. F., Monticello, Fla. (Hon.)

**TOOMBS COUNTY****Officer**

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**Members**

Aiken, W. W., Lyons  
 Camp, J. A., Ohoopce  
 Currie, M. L., Vidalia  
 Findley, C. W., Vidalia  
 Hall, J. K., Lyons  
 Mercer, J. E., Vidalia  
 Odom, W. W., Lyons  
 Williams, Chas. D., Vidalia  
 Youmans, H. D., Lyons

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(Calhoun, Early and Miller  
 Counties)

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**COMMUNICATIONS****INSURANCE***To the Editor:*

The Fulton County Medical Society has arranged with the Gem City Life Insurance Company of Dayton, Ohio, to furnish Group Insurance to the members of the society.

The Physicians and Dentists Credit Bureau has agreed to handle all premiums without cost to the society, as the society had no way of collecting the premiums.

Under the above plan you will be able to secure a Group Policy of Life Insurance in the sum of \$3,000, which very materially increases the value of your estate and provides the protection which you desire for your beneficiary.

We are gratified to provide this service to the members of the Fulton County Medical Society. Under this plan you have a very liberal contract, at an extremely low cost, which only you can terminate. We feel sure that you will avail yourself of this opportunity.

For further information call Walnut 8418 or Walnut 3950.

THE FULTON COUNTY MEDICAL SOCIETY.

Dan Y. Sage, M.D., *Chairman,*  
*Committee on Group Insurance.*

Atlanta, Ga., Nov. 15, 1930.

**CENTENNIAL MEMORIAL BUILDING FUND***To the Editor:*

This letter is sent to you to inform you of the progress of collections for the Centennial Memorial Building Fund.

As you know, practically all of the subscriptions were made on a basis of extended payments over a period of years. It required a little over a year to conduct the campaign, which ran from January, 1928, to February, 1929. Many of the pledges were post-dated and some have not yet reached the date for the first payment.

In spite of the fact that the average pledge has been paid on for only about one year, collections to

date total \$43,463.67. Considering the financial depression, which has caused the postponement of many pledges and no doubt prevented a much higher percentage of collections, the amount paid in already is a credit to the seriousness and integrity of the subscribers.

The method of conducting the campaign was authorized by the Alumni Society and all the expenses attaching to it, which were considerable, have long since been paid. A fund of this kind can be raised in no other way than the one used in this instance and the percentage cost per dollar of the \$265,000 subscribed was only about two-thirds the average cost in such campaigns.

As evidence of the fact that the collections are being actively carried on and that the fund is growing, \$8,498.67 has been deposited to the credit of the fund since July 1, 1930. This represents a period when collections are usually poorest.

When the Medical Association of Georgia convenes in Atlanta next spring there will be a meeting of the Alumni Society and at this time the Executive Committee will gladly entertain suggestions for getting building operations under way.

G. LOMBARD KELLY, M.D.,

*Chairman, Executive Committee.*

Augusta, Ga., Oct. 28, 1930.

Nutley, N. J.

Hoffmann-La Roche, Inc., well-known as "makers of medicine of rare quality", have extended their property by the purchase of ten additional acres of land, making a total tract of thirty-five acres. The purchase was deemed essential in the light of the Company's steadily increasing sales under keen aggressive management.

In the words of Mr. Elmer H. Bobst, General Manager, "Hoffmann-La Roche has just begun to grow!"

THEY ADVERTISE.

The eighty-second annual session of the Medical Association of Georgia will be held in the ball room of the Biltmore Hotel, Atlanta, May, 12, 13, 14, 15, 1931.

## BOOK REVIEWS AND ABSTRACTS

*New and Nonofficial Remedies*, 1930. Cloth. Price, \$1.50. Pp. 481; xlviii. Chicago: American Medical Association, 1930.

The present edition contains all of the features that have in the past made *New and Nonofficial Remedies* such a reliable and efficient guide to the physician who wishes to inform himself on the newer medicinal preparations: logical classification of preparations, with authoritative articles on each class; complete and carefully written descriptions of preparations; elaborate indexes; and a useful cumulative list of references to the literature on articles not accepted by the Council. Among the more important revisions that appear in this edition are those of the general articles, Barbitol and Barbitol Compounds, Digestive Enzymes, Cod Liver Oil and Cod Liver Oil Preparations, Ovary, Pituitary Gland, Radium and Radium Salts, and Serums and Vaccines. Among the new preparations descriptions of which appear for the first time in this edition are: Bismarsen, which is sulpharsphenamine bismuth; Dial-Ciba, which is diacetylbarbituric acid; Calcium Gluconate-Sandoz, a more palatable and less irritating preparation of calcium; Atoquinol-Ciba, a cinchophen derivative; Pitocin and Pitressin, solutions respectively of the oxytocic and pressor principles of the pituitary gland; Viosterol (the Council name for irradiated ergosterol) in the forms of Viosterol in Oil 100 D, which is irradiated ergosterol dissolved in vegetable oil, and Cod Liver Oil with Viosterol 5 D, which is cod liver oil with its vitamin D potency enhanced by addition of viosterol. While these new preparations (with the possible exception of Viosterol) do not constitute major additions to the physician's armamentarium, each one gives promise of relative usefulness, and the physician who desires to keep abreast with the progress of therapeutics will familiarize himself with them as well as with the many other new preparations described in this valuable book.

*Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1929*. With comments that have appeared in the Journal. Cloth. Price \$1. Pp. 81. Chicago: American Medical Association, 1930.

This is the volume in which the Council annually collects the reports on articles found unacceptable during the year. This edition contains also several interesting preliminary reports on preparations which show promise but for which the evidence is not yet sufficient to justify acceptance by the Council. Reports are given on the following products rejected by the Council: Anayodin, claimed to be iodoxyquinolinol sulphonic acid (chiniofon) but marketed under a non-informing name without adequate statement of composition and with unwarranted therapeutic claims; Antiustio, an unscientific mixture marketed under a nondescriptive name with unwarranted therapeutic claims; Kerasol and Keraphen, unoriginal products

marketed under non-informing names; Sodiphene, an unoriginal alkaline phenol preparation marketed under a proprietary name with unwarranted therapeutic claims; Borocaine, procaine borate under a proprietary name; Quicamphol (Transpulmin), a quinine preparation for intramuscular injection in the treatment of lobar pneumonia; Toxogon, a preparation of inadequately declared composition marketed under a therapeutically suggestive name; Intramuscular Iron Arsenic Comp. (No. 201) and (Intravenous) Iron Cacod. and Glycerophosphate (No. 202), two irrational and unscientific mixtures exploited with emphasis on the numbers. Other rejected products are: Ovocerrin, Tamerici Salts, Elixir Kacyan-McNeil, and Tablets Kacyan-McNeil. An authoritative article on serum disease and serum accidents by MacKenzie and Hanger is of considerable interest and timely importance.

### BOOKS RECEIVED

*A Textbook of Practical Therapeutics*, With Special Reference to the Application of Remedial Measures to Disease and Their Employment Upon a Rational Basis. By Hobart Amory Hare, B.Sc., M.D., LL.D., Professor of Therapeutics, Materia Medica, and Diagnosis in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; one-time Clinical Professor of Diseases of Children in the University of Pennsylvania; one-time Commander, M. C., U. S. N. R. F. Twenty-first edition, enlarged, thoroughly revised and largely rewritten. Contains 1,104 pages, with 145 illustrations and six plates. Publishers: Lea & Febiger, 600 South Washington Square, Philadelphia, Pa. Price \$7.50 net.

*Medical Biometry and Statistics*. By Raymond Pearl, Ph.D., Sc.D., LL.D., Professor of Biology in the School of Hygiene and Public Health, and in the Medical School, Johns Hopkins University, Baltimore, Md. Contains 459 pages; second edition, revised and enlarged. Philadelphia and London: W. B. Saunders Company, Philadelphia, 1930. Cloth, \$5.50.

*A Primer for Diabetic Patients*. By Russell M. Wilder, M.D., Professor and Chairman of the Department of Medicine, University of Chicago Clinics; formerly head of the Section on Nutrition, Division of Medicine, Mayo Clinic. Fourth edition, revised; 138 pages. Philadelphia and London: W. B. Saunders Company, Philadelphia, 1930. Cloth, \$1.50.

*The Treatment of Epilepsy*. By Fritz B. Talbot, M.D., Clinical Professor of Pediatrics, Harvard University Medical School; Chief of Children's Medical Department, Massachusetts General Hospital. Contains 308 pages. Publishers: The Macmillan Company, 60 Fifth Avenue, New York City. Price \$4.00.



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January-December, 1930

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CATALOGUED  
MAR 13 1951  
G.G.Q.

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## MICHIGAN MEDICAL SCHOOL REORGANIZES

The appointment of a new executive committee to govern the University of Michigan Medical School was approved recently at a meeting of the board of regents. Dr. Frederick G. Novy, head of the department of bacteriology and a member of the old executive committee, has been appointed director of the division of pre-clinical medicine. Dr. James D. Bruce will continue the supervision of graduate medicine, while clinical medicine will be directed by Dr. Udo J. Wile of the department of dermatology and syphilology. Dr. Arthur C. Curtis, former assistant to the dean of the medical school will assume his new duties as secretary. Dr. Harley A. Haynes will have complete direction of the University Hospital.—Federation Bulletin, November, 1930.

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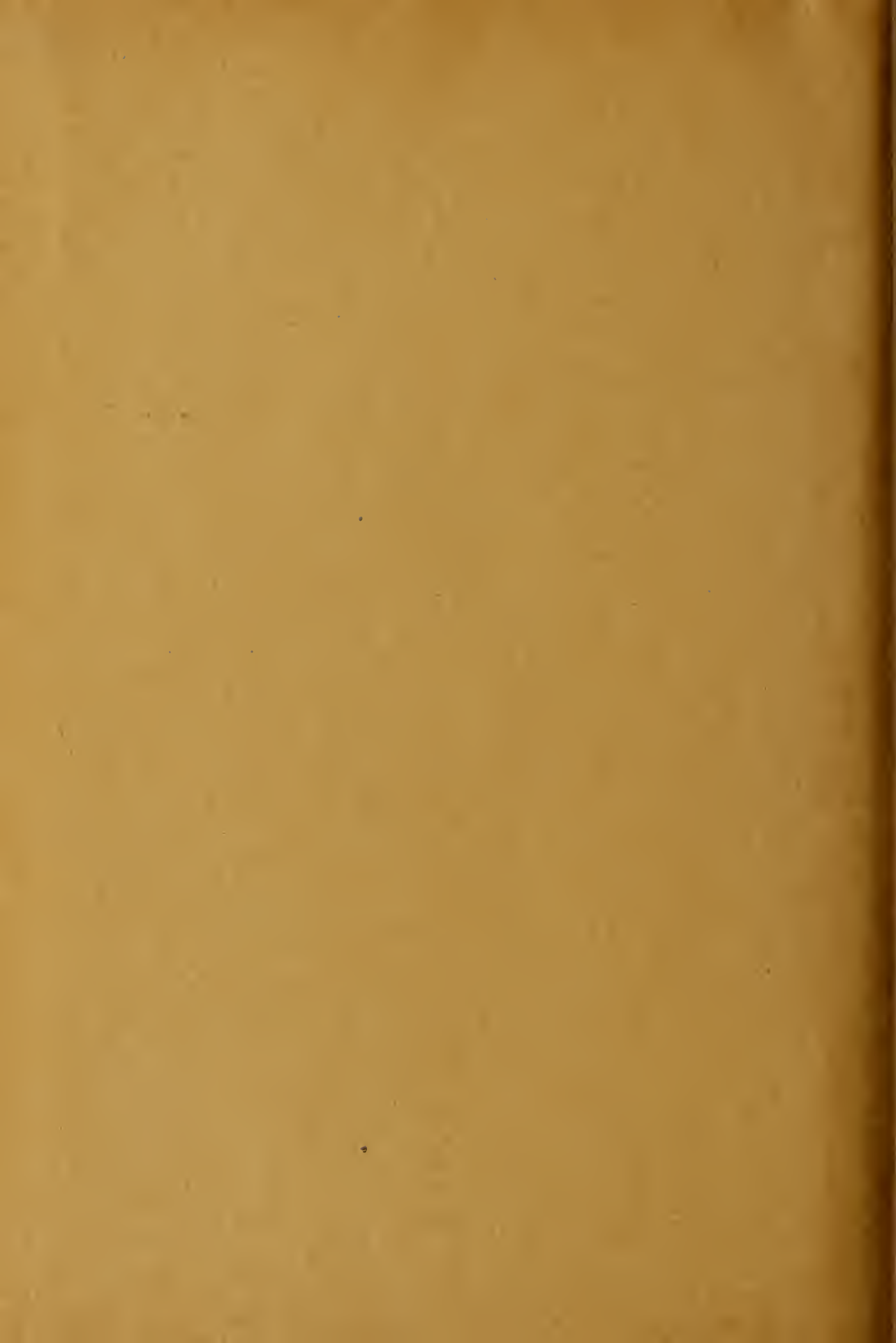
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